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THE CHICAGO

MEDICAL JOURNAL.

DANIEL BRAINARD, M. D.,
J. ADAMS ALLEN, M. D.,
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DR. EDWARD L. HOLMES,

28 North Clark Street, Chicago.

Special attention given to diseases of the Eye and Ear.

Referred, by permission, to the editors of this journal.

CHICAGO
MEDICAL JOURNAL.

VOL. V.] JANUARY, 1862. [No. 1.

ORIGINAL COMMUNICATIONS.

A CASE OF RUPTURE OF THE UTERUS.

By E. L. HOLMES, M. D., of Chicago.

The statistics of obstetric science, derived from hospital records, present so large an aggregate number of cases of Rupture of the Uterus, and our periodical publications give us so frequently the history of such cases, as they occur in private practice, that the report of an additional case may possibly be considered by our readers as useless.

The following brief report, however, of a case of this terrible accident may be of some importance to those interested in collecting facts relating to this subject:

I was called some time since to attend an Irish woman about 32 years of age, in her fourth confinement. The liquor amnii had been discharged about fourteen hours before my visit, although decided labor pains did not commence till ten or twelve hours after the discharge of the uterus. The patient informed me that her health had always been good even in pregnancy, but that her previous labors had been protracted and quite difficult.

The os uteri was but slightly dilated—head presenting with vertex to the left acetabulum—pains very moderate and occurring at intervals of ten or fifteen minutes.

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At the end of six hours, during which time I had visited the patient quite often, the os uteri had become well dilated and the head had passed the superior strait. The patient was in good spirits and quite strong. Labor was tedious, but otherwise progressing favorably.

I had occasion to leave the house for a few moments, and on my return was informed at the door that the patient was dying. It appeared that a moment before, while in an ordinary pain, the patient suddenly uttered a shriek and fainted, when all symptoms of labor pains ceased. I found her complaining of intense pain in the abdomen and of great thirst. The extremities were cold, lips purple and face covered with cold prespiration. The breathing was hurried, pulse scarcely perceptible and strength evidently failing. I immediately removed the pillow from the head; directed full doses of brandy and water, and sent a messenger a short distance for Prof. Freer, who arrived in a few minutes; and, as a pair of forceps was not at hand, delivered the woman with some difficulty by turning. On passing my hand into the uterus for the placenta, I found the organ wholly uncontracted, with a rupture in the fundus about 4½ inches long, extending obliquely across the right side, downwards and forwards. A fold of the intestines was lying in the rupture. There was no more external hæmorrhage than usual, nor was there an undue amount of coagula in the uterus with the placenta.

The great prostration of the patient was undoubtedly caused by the nervous shock rather than the extensive loss of blood. Death occurred about three minutes after the delivery of the child. No autopsy was obtained.

NOTES OF A CASE OF IMPACTION OF THE APPENDIX VERMIFORMIS—CŒCITIS—DEATH—POST-MORTEM APPEARANCES.

By DE LASKIE MILLER, M. D.

The following brief history of a case which recently came under my care, is so strikingly similar in its course and termination to cases which occasionally occur in practice, in which treatment proves unavailing, but in which no post-mortem examination is made, which would reveal the real cause of the disease and death, that I am induced to give it publicity. It may furnish a key for the explanation of similar cases, which, like this, cannot be regarded otherwise than unfortunate in the extreme, on account of the distressing symptoms, and the utter impossibility of arresting the progress of the disease or of averting the sad termination.

Walter B., aged about twenty months, rather over the usual size of children of his age, had enjoyed good general health, with the exception of occasional attacks of slight indisposition. A somewhat protracted course of psorophthalmia from which he had recovered gave rise to a suspicion of strumous predisposition.

In the early part of July I was requested to visit him on account of a slight derangement of the bowels. He had some diarrhœa, though the discharges were not very frequent or profuse, and although he suffered from occaasional attacks of pain, there was no appearance of any unusual complication which should render the case unmanageable. Antacid astringents and anodynes were prescribed which afforded temporary relief. The paroxysms of pain, however, continued to recur with increasing severity; the evacuations from the bowels ceased, but nausea and vomiting ensued. The abdomen now began to be distended and tympanitic. A congenial embilical

hernia gave rise to the suspicion that strangulation might cause some of the symptoms, but a careful and thorough examination, in which I obtained the valuable assistance of Prof. Brainard, led to the conclusion that no complication of this kind existed. The bowels not having acted for several days, an attempt was made to effect this and overcome any obstruction which might exist, by large enemas of warm water introduced through one of O'Brien's tubes, This was repeated from time to time, without, however, producing the desired effect. The paroxysms of pain continued to increase in severity until they became agonizing, and the vomiting was more frequent and distressing. These symptoms continued, while the strength of the system gave way, notwithstanding my most sedulous endeavors to sustain the vital powers, and death took place twelve days after my first visit.

The post-mortem examination made twelve hours after death, in which I was assisted by Prof. Ingals, revealed the small intestines greatly distended, principally with gas, (but not entirely); the large intestines nearly empty. The coats of the bowels were but slightly injected and not discolored, except at the cæcum, the coats of which were considerably thickened and of a dark color. The appendix was enlarged, and completely filled and distended with fecal and decomposing matters. Its coats were thickened and of a livid color, and a few small patches of lymph lay on the peritoneal coat of it and the cæcum; with this exception the peritoneum appeared quite healthy. At the junction of the small with the large intestines two excrescences of considerable size were found, which were so situated as to have had the effect apparently of compressing and closing the ileo cæcal orifice.

The examination revealed the exact seat of the disease, the cause of its persistence and fatality, viz: the distension of the appendix with highly irritating matter. The cause of this impaction, or rather the reason why it does not more frequently occur so as to lead to a fatal termination, would be an interesting question for investigation.

The following selections, taken from the standard authors at hand, give the views entertained upon the causes, symptoms and termination:

"Diminished contractile power of the muscular coat, with distension of the intestine and over-exertion are the probable causes of propulsion of fæces into the appendix. * * However produced any concretion in this part leads to very serious results. * * In strumous patients these concretions more readily tend to an unfavorable result, leading to perforation, abscess or peritonitis. * * There appears to be a greater tendency to this local enteritis of the cæcum in strumous than in other subjects. * * Disease af the appendix sometimes exists for some time without manifesting any symptoms."—*Habershon on the Alimentary Canal.*

This author gives numerous cases where the fatal result was attributed to impaction of fæces in the appendix, and expresses the opinion that this is most liable to occur in early life.

"Whatever the seat of the obstruction its existence is portrayed by much the same train of symptoms in all cases."—*West on the Diseases of Children.*

Then follows an examination of the symptoms almost exactly as they occurred in the subject of this case.

"Not a few cases are recorded where the most violent inflammation was induced by the impaction of fœcal matter in the appendix, followed by gangrene of the tube and general peritonitis."—*Gross, Path. Anat.*

"This disease has been almost invariably fatal."—*London Lancet.*

Bell and Stokes conclude their description of the disease as follows:

"It will be observed that in the cases now related there was at first diarrhœa, which was followed by obstinate constipation. Such is the usual occurrence whenever the cellular substance round the cæcum becomes inflamed, owing to the loss of contractility in the muscular coat of the intestines by inflammation and partly to the mechanical pressure of the swelling on the cæcum, and on the colon also, and small bowels. * * The prognosis is by no means favorable."

Copland's Dictionery of Medicine contains a most elaborate

and valuable article upon this subject, wherein it is stated that inflammation of the appendix, when occasioned by impaction, often does not extend to the cæcum even, but that such cases are most rapid and dangerous." In regard to treatment, it is advised that "the assiduous administration of enemata must not be neglected; it is entirely by their agency in this state of disease that the bowels are to be evacuated."

Similar views are expressed in Wood's Practice, in Dunglison's Practice, in the Library of Practical Medicine, etc., etc.

From the history of the case given above, and these references to the disease, the conclusion is irresistable, that if post-mortem examinations were made more frequently, this complication would be met with many times, where now it is not suspected.

CASES TREATED WITH *KREOSOTE.*

By H. VANTYLE PASSAGE, M. D.,
Of Peru, Indiana.

Case First.—Lupus Exedens.

About the 5th of last March, I was called to see Mr. H——, aged 30 years. He informed me that he had a cancer on his nose, of three years standing; that he had employed the services of a number of doctors, and all had assured him it was a cancer. I questioned him in regard to its origin and progress, and ascertained that swelling and inflammation of the *alæ nasi* was the first symptom he noticed of the disease, and it had progressed gradually ever since. At the time of my visit, there was excoriation of the external surface as far up as the arch of the nose, which was partly covered with dry scabs, and the remaining portion of the surface secreting an ichorous matter. The internal surface was in a state of excoriation as far up as the upper portion of the nasar arch (the

septum of the nose being destroyed up to the vomer), and secreting a matter much like the external exudation. My diagnosis was, *Lupus Exedens*, or *noli me tangere.*

I adopted the treatment taught me by Prof. Brainard, which was Iodide of Potasii internal, and directed the surface to be washed every day with warm water and *Sapo Cast*, followed by the application of Kreosote. I directed the application to be made with a camel hair pencil and over all the exuding surface.

This treatment was kept up until the cure was completed, which was done in about two months, and there has been no symptom of a return of the disease up to the present (December 10th) time. I give the facts and leave any further comment to the reader.

Case Second.—HÆMORRHOIDS.

Rev. Mr. B—— applied to me about the first of June, and informed me that he had been troubled with piles for nine years, and was so troubled at times that he could not ride on horseback. He had three tumors in the rectum, the farthest one being about one and-a-half inches from the external anus. Notwithstanding the liability of internal Piles to bleed, they never had troubled him with hæmorrhage. I ordered that the bowels should be kept open with mild apperients and the rectum washed once a day with *Aqua Pura* and *Sapo Cast*; then apply an ointment to the tumors composed of Kreosote and lard, equal parts. This treatment was followed for about three months, when the patient informed me that the tumors were all gone except the one highest up in the rectum, and that was hanging by a string and moving up and down according to the posture he assumed. I severed the cord-like substance that retained the tumor and it was removed. The old gentleman has attended to his business as an itinerant minister without any inconvenience since the cure was completed; and I may add that the only trouble during the treatment was in applying the remedy.

I have since applied the Kreosote ointment to a case of external Piles, of eight months standing, with a good result, the tumor disappearing in about four weeks.

Case Third.—Chancre.

I was treating a case of soft Chancre or primary Syphilis, which refused to yield to the lunar caustic. The Chancres were three in number and situated on the gland beneath the prepuce. I applied the clear Kreosote with a camel hair pencil. The patient drew the prepuce over the glands, and as far as the Kreosote came in contact with the mucus membrane it formed a blister, but in two days the blister came off in the form of a scab and the Chancres were gone.

I have since used the Kreosote in a case of Chancre on the external portion of the prepuce, and it was entirely destroyed in seven days.

I am using the Kreosote in two cases of more importance than any of those related, and I will report as soon as I obtain the result.

TREATMENT OF SEA-SICKNESS.

Thomas M. Hocken, M. R. C. S., and formerly of the ship *Great Britain*, uses the following in cases of sea-sickness:—"Dilute hydrochloric acid, two drachms; dilute nitric acid, one drachm; hydrocyanic acid (Scheele's), sixteen minims; sulphate of magnesia, six drachms; water to eight ounces. Two table-spoonfuls to be taken every three or four hours." Previous to its administration he gives, as he says in the *Lancet*, "a sound purge of calomel and colocynth, or of croton oil on sugar, taken with as little water as possible. Diet, gruel, sago, or arrowroot, with a little brandy, and dry toast and tea.

SELECTED.

DENTITION AND ITS DERANGEMENTS.

By A. JACOBI, M. D.

Lecture VI.—Part I.—No part of the infantile organism is more exposed to injurious influences than the mucous membrane of the mouth, nor is there any which is more frequently observed to suffer. Traumatic injuries are not frequent, except those sometimes produced by sharp margins of teeth irregularly shaped; the more frequent affections are those resulting either from chemical influences, or from an excessive degree of temperature. The mucous membrane of the mouth is very irritable, being accustomed only to amniotic liquor in fœtal life, and to milk in the early stage of extra-uterine existence. Every change in the diet, therefore, the bad quality of the maternal or artificial nipples, the use of candy, sucking bags, or alcoholic beverages, coffee, or stimulants of whatever kind, will act as irritants, producing hyperæmia or inflammation in a more or less severe form. It is by no means common to observe very severe forms of stomatitis after all such preceding causes; on the contrary, the large majority of cases, including those depending on primary acute catarrh of the stomach, and the raising of a large quantity of gastric acid, so frequent in infantile age, are very mild. Nor are some of the most severe forms of stomatitis in adults often found in early age. Thus it is a peculiar fact that the influence of the external and internal use of mercury has little influence on the mucous membrane of the mouth, or the salivary glands, in infantile life. Whatever the consequences of the administration of mercurial preparations may be, salivation, or even a mild form of erythematous stomatitis, is seldom observed; in a large number of adult patients there will perhaps none be found who will not suffer from a certain amount of mercury, but of infants and children of even more advanced age, those who show mercurial symptoms are exceptions to the rule.

There are a number of indirect influences also observed to produce the common, or erythematous form of stomatitis. It will often be seen in dependence on, or in connection with

traumatic injuries of the face, erysipelas, and hyperæmia and inflammation of the pharynx. It is further seen under the influence of many dyscrastic processes, as it is a very common symptom attending scarlatina, variola, morbilli, syphilis, and typhoid fever. It is frequently, as its causes will often continue or return, or be replaced by others, of long duration and obstinacy, like the pharyngeal hyperæmia and swelling in adults, and very generally proves a serious difficulty, although unattended by severe fever or deep seated anatomical disorganization of any particular organ. Injection, swelling, high temperature, and slightly reddened color of the mucous membrane, copious or suppressed secretion, and pain on being touched, are the usual symptoms of the common form of erythematous stomatitis.

A more severe form is that known by the name of aphthous stomatitis. The superficial layers of the epithelium are not thrown off during the hyperæmic swelling of the mucous membrane, as in erythematous stomatitis, but a real and visible change takes place in the anatomical structure of the follicles. There is a circumscribed, punctated, vascular injection around a follicle, which is gradually infiltrated by exudation. The consecutive swelling increases in proportion, the follicles will burst and exhibit a superficial erosion, or ulceration, and the adjacent mucous membrane will be sympathetically affected. Some of these cases, which are by no means very frequent, look very much like the vesicles of labial herpes, with the only exception that they are less accommodated on a certain small locality; some may be explained by mechanical injuries, some can not be explained at all. If it was not for those cases occurring in the first two months of life, so well described by Beduar, aphthous inflammation of the mouth would be a very rare disease; at all events the first stage will seldom come under observation, and usually the second stage, in which the vesicles are fully developed, is brought to your notice.

That dentition, that is, the protrusion of teeth through the gums, can have nothing to do with this form of stomatitis, is manifest from the fact that it occurs mostly in the earliest period where teeth protrude in but very rare and exceptional cases; and that, whenever it is seen in advanced age, no connection, either casual or as to time, can be found between the two. Much less can be said of all the forms of inflammation of the tongue, known to be the consequences of caustic substances, combustion, or the poisonous stings of insects; this

parenchymatous glossitis has not even been supposed by the most ardent advocates of the universal danger of dentition to be the result of its influence. Nor are the most severe forms of disease of the mouth attributed to dentition, like noma, or scurvy, or diphtheritic inflammation. They are, like the usual form of stomacace, in which fibrinous exudations are deposed into the superficial layers of the mucous membrane, with an immediate tendency to gangrenous decomposition, well known to be not only the result of a local affection, but more so of a general decomposition of the blood. They are to be considered as the local symptoms of a general disease, the former being entirely subordinate; to say nothing of the age in which they occur by preference. Diphtheric inflammation will occur in any age, but mostly between the first and third, at all events rarely before and during the protrusion of the first incisors; scurvy, noma, and stomacace are mostly seen in a somewhat advanced age, between the fourth and tenth years of life. In these, the local affection is something; but the larger amount of the symptoms and of danger depends on the general character of the disease.

There is another form of disease, on which nearly the same remarks may be made. Inflammation of the parotid gland, both idiopathic and symptomatic, is not a very uncommon disease, except in the age of dentition. Idiopathic parotitis will usually occur as an epidemic disease, in a similar manner as diseases of the larynx, or pneumonia, will appear as an epidemic, from some causes not perfectly understood, but depending on season and the condition of the atmosphere; this idiopathic form is seldom seen both in the first year of life and in sensile age. The symptomatic form, which will usually terminate in suppuration, and is observed in certain epidemics of typhoid fever, cholera, septicohæmia, and in some of variola, measles, dysentery and pneumonia, is very rarely observed in small children; and therefore, among the cases of the above-named diseases, dentition is out of the question, with the exception, perhaps, of an occasional slight swelling of the parotid gland, brought on by the contiguity of the mucous membrane. I certainly do not deny the possibility of erythematons stomatitis occurring during the protrusion through abnormal gums, of perhaps an abnormal tooth, in an abnormal direction, and in an abnormally irritable child—one or more of these conditions being together, and therefore admit that a mild parotitis may sometimes occur in a casual connection with dentition; but what I deny, and have attempted to prove

by the illustration of the physiological process of dentition, is this, that diseases depending on this process are not the rules, but the exceptions. At all events, not even the slightest erythematous stomatitis must be permitted to go on the plea of dentition, unless there is a local hyperæmia of the gums, the seat of the supposed cause of disease, corresponding with the more general affection. I lay the more stress on this, as I believe I have shown by the numerous causes of stomatitis exhibited to you, that we need not be at a loss to find a cause in any given case, if we are competent to form a differential diagnosis. As long as there is certainty, we had better not resort to hypothesis or conjecture.

If a large number of cases of stomatitis was the result of dentition, why is that a uniform mode of treatment, if any its resorted to, has been accepted in these cases, relating to, and dependent on this cause? And why is it, that if any uniform treatment has been accepted, and is recommendable, it is just such as has no connection whatever with dentition? And why further is it, that having no regard whatever to either teeth or gums, it is so uniformly successful? I speak of the chlorate of both potassa and soda, the effect of which in all these cases can no longer be doubted. It has long been a matter of difficulty after it had been largely introduced into practice, since the times of Hunt, West, Isambert and others, to decide whether the effect was local or general. But the experiments of Gamberini and Semnola show, that the local effect of chlorate of potassa in mercurial stomatitis is very little, if any; but that the same remedy administered in sugar-coated pills, has a satisfactory effect. My own experience has led me to the same conviction, although, if any local effect is produced, it could be done by the chlorate being transmitted into and secreted by the saliva.

Another of those diseases often enumerated among the consequences of dentition is that sometimes called membranous stomatitis, now better known by the French name of "muguet."

Muguet is an affection which a few facts will prove to have not the slightest connection with dentition. It has been generally observed in new-born infants, or in those but a few weeks old, but it is occasionally met with in more advanced life, even in adults suffering from exhausting and fatal diseases, towards the close of life. It is known by the occurrence of whitish or greyish, cream or cheese-like deposits of variable sizes, on the mucous membrane of the upper part of the digestive tract; they will be found on the lips, tongue, cheeks,

pharynx, even in the larynx and œsophagus, but never in the stomach. One of its prominent symptoms, as described by adults, is a burning pain in the mouth, corresponding with the local affection; that infants suffer in a similar manner, is proved by their crying on being touched, and by their unwillingness to take the breast or swallow. Where no deposit happens to be seen, the mucous membrane appears injected, dry and smooth, and but little mucus and saliva is secreted. In perhaps every case diarrhea has been observed; so regularly indeed, that Vallaix speaks of diarrhea as one of the common and almost pathognomonic symptoms of muguet. It is, however, probable that its cause is to be sought for in the impaired digestion, want of mastication, absence of saliva, and affection of the mucous membrane generally.

The enumeration of a number of symptoms does not explain the nature of a morbid process, or a pathological deposit; and nothing but a description of the pultaceous deposits on the mucous membrane will illustrate the morbid change taking place in the mouth. They consist of the mucus of the lining membranes, of old and new epithelial cells, of fat globules, particles of food more or less decomposed, and finally, of microscopical fungous growths of different size, with sharp outlines and indentations, from which equally composed thalli will originate, to such a number sometimes as to form a network of dendritic parasitic tissue. The fungus was discovered by Robin, and called *oidium albicans*, and has been described by Laycock, Gubler, and a host of other medical writers. It is not known in any form differing from that found in the mouth, and it is probable that it is, as such, contained in the air, and deposited at the entrance of the digestive organs; at least no other opportunity for its occurrence on the mucous membrane of the mouth is possible. It may be transmitted by the atmosphere, or transplanted from one individual to another by direct contact, by the use of the same spoon, etc. But it will not always develop itself with the same readiness, certain conditions being required. They depend on an acid condition of the mucous secretion of the mouth, a certain dryness of and injection of the mucous membrane, feebleness of mastication, and easy access of air.

It is important to observe, that the secretion (as far as it is kept up) of the mucous membrane of the mouth is acid instead of alkaline. It is very frequently found in infants whose mouths are not kept so clean as they ought to be, who are accustomed to sleep while, or immediately after, taking the

breast, and retaining milk in their mouth, which soon is decomposed and acid. Muguet is therefore often found in foundling hospitals, where the inmates receive but little care, and uncleanliness is almost the general rule. Where proper cleanliness is strictly enforced, no muguet will appear, because no parasitic fungus is allowed to settle and form a crust of pultaceous matter. Thus pure water is both the best prophylactic and curative agent; the only thing worth adding is a small quantity of alkaline substance, chlorate of potassa or soda, carbonate of potassa or soda, biborate of soda or chloride of sodium. The mouth of every infant ought to be washed out after each meal, to be certain that no deposit remains on the mucous membrane. Where such has been the case, the local treatment alluded is perfectly sufficient. The deposit is found in the superficial layers of the epithelium; it seldom reaches the deeper ones, and scarcely ever implicates the lining membrane itself. Thus cleanliness will remove the affections; the surface sometimes bleeds when the deposit is rubbed off. The addition of sugar, rose-honey, or syrup, to the water (or weak alkaline solution), must be strictly avoided; these substances will adhere to the lining membrane and themselves undergo decomposition and prove a source of new difficulties.

The occurrence of muguet, then is a mere accident, and has no intrinsic connection either with a distinct morbid process, or with any certain period of early infantile development. It is no more characteristic of any constitutional disease, or general condition of the system, than tinea favosa on any part of the surface, which may be communicated from either man or animal, or scabies. You readily perceive that there is no shadow of a reason to search for any connecting link between the formation and protrusion of teeth and the accidental peculiar deposit on the mucous membrane of the mouth, called muguet, which years ago could be taken for a special kind of exudative stomatitis, but is now well understood.—*American Medical Times.*

"THE CONNECTION BETWEEN CEPHALIC SYMPTOMS AND ORGANIC LESIONS, IN CHILDREN."

Read before the Norfolk (Mass.) District Medical Society, November 13th, 1861, by B. E. Cotting, M. D., of Roxbury.*

In repeating the proposition offered for consideration, it will be noticed that the subjects specified are children; the symptoms given, cephalic; the solution sought, the anatomical conditions or changes which underlie or induce the outward manifestations.

If, then, we find a child previously healthy the following *reputed* cephalic symptoms, coming on with marked severity and regularity, viz.:—sudden high fever, ushered in, perhaps, by convulsive agitations; a sharp, frequent pulse; irregular respiration; moaning; staring, injected eyeballs; unusual irritability of temper; great apparent headache, increased by motion, the patient steadying the head by the hands; piercing cries, as of severe and darting pain; great sensitiveness to noise and light; strabismus, or unsteady pupil; great restlessness; twitchings of the face and muscles generally; frequent vomiting, without pain or tenderness in abdomen, often without apparent nausea, and without subsequent relief; constipation more or less obstinate—if we find such a general combination of symptoms, we may have good reason to infer that they are connected with an inflammatory process going on within the cranium, that the pia mater is the principal seat of this inflammation—constituting the disease usually called by the latest writers ACUTE MENINGITIS; and we may also infer that this inflammatory process is accompanied, in the membrane involved, by redness, fulness even to swelling (congestion, so-called)—at first dryness, and then exudatory moisture.

And furthermore, if the disease continues to increase, and (not brought to a rapid termination in severe convulsions) goes on, with varied and irregular intermissions, to loss of perception; paralysis; general muscular relaxation; dilated pupil; stertorous breathing; feeble, fluttering, intermittent pulse;

* It is customary in this Society to propose questions for discussion, and to appoint members (in alphabetical order) to open the discussion by written papers. The following was written in obedience to such a call. Without any special pretensions to originality, the writer, in expressing his own opinions, has not hesitated to avail himself of whatever suited his purpose from others—Reynolds, Wilks, etc., etc.

sunken face; retracted abdomen; involuntary discharges; general prostration, and death—a *post-mortem* examination will show the cerebral membranes more or less intensely injected, but smooth or not granular; the surface of the brain covered in part, or whole, with lymph originating from the membranes; lymph often purulent, sometimes filling the interspaces or conceiling the convolutions by its amount. This lymph is found under the arachnoid, and usually less towards the base of the brain, but in exceptional cases the base seems to have been the seat of the attack, and to be covered with the larger quantity.

Generally little or no change can be discovered in the ventricles, excepting now and then an increased amount of serum. The brain-substance, adjacent to the meningeal inflammation, and evidently disturbed by it as the symptoms indicated, does not always exhibit morbid changes after death. It is sometimes, however, injected or softened. The arachnoid is also occasionally affected, presenting a dry or sticky surface.

This disease is rare. A general practitioner is not likely to see, in his own practice, more than one or two cases in a lifetime. West, with all the advantages of a hospital and a speciality, saw but *seven*, and these were all fatal. The duration of the disease is short—it may be not more than three or four days.

If now, on the other hand, we find in a child of previously unhealthy tendencies, cephalic symptoms somewhat similar to those just enumerated, except, perhaps, that besides being less abrupt and violent in their onset, they are less rapid in their progress—having been preceded for some time by slight febrile disturbances, dull pain in the head, giddiness, uncertain or staggering walk, restlessness, peevishness and the like, most or all of these so light, perhaps, as to have scarcely attracted a passing notice—if, with such antecedents, we find obstinate and unprovoked vomiting, constipation, often a short hacking cough—more or less of these symptoms intermitting at irregular intervals, and recurring with increased severity, with greater pain, wandering delirium, drowsiness, etc.—from intolerance of disturbance to loss of perception, convulsions, hemiplegia, and finally general paralysis—accompanied by a rapid, declining pulse, cold extremities, and at last *death;* if we find such a series progressing in a child which has in itself or through its progenitors a tendency to scrofula, tubercular formations, or other kindred debilitating affections, we may be quite sure that we have to deal with TUBERCULAR MENINGITIS;

and that the cephalic symptoms exhibited, whether simple or complicated, arise from the development and growth of tubercular disease in the meninges, communicating a disturbing influence to the cerebral substance.

After death there will be found, in a large majority of cases, lymph at the base of the brain, always tubercles in the pia mater, serous effusion in the ventricles, in a greater degree than in the previously described affection; accompanied usually, though not always, by some perceptible softening or other morbid condition in the adjacent portions of the cerebral substance itself. Oftentimes confirmed tubercular deposits in other organs, especially the lungs, leave no doubt of the true character of the disease.

The duration of the disease is generally two or three, or more, weeks after the symptoms are well confirmed. It is not an unfrequent disease. Every physician is liable to meet with one or more cases every year of his practice. And from what has been said, it may be inferred that it seldom if ever occurs as a primary affection; and that it must of necessity, usually if not always, have a fatal termination.

This is the disease which Wytt (who a hundred years ago gave a very graphic description of it) called *hydrocephalus internus*, from an occasional though by no means constant result of its inflammatory action. He was not so unphilosophical as to give it the absurd title of *acute hydrocephalus*. which has been attributed to him.

Tubercular meningitis is the most common and well-marked encephalic disease in children, and such are the connections between its symptoms and the lesions which observation has revealed.

It is not uncommon for authors to call the diseases we have described meningitis and arachnitis indiscriminately, and to speak of the latter as a frequent affection, but it is our belief that *arachnitis*, uncomplicated, that is, a simple primary inflammation of the arachnoid membrane, is a very rare disease—so rare that some of our most experienced pathologists have never seen a case of it. Whenever adjacent inflammation extends to the arachnoid, it seldom produces any other perceptible lesion than a little greasy or sticky feeling on its surface; and the connection of such lesion with preexisting symptoms is so obscure or so slight as to be of little practical importance. In general those affections of the arachnoid, which become of clinical importance, arise from

disease, or external injury, of the dura mater, and are to be studied in connection therewith.

Inflammation of the dura mater, so far as known, is a result of injury or disease externally affecting the bony structures of the head.

Cerebritis.—The "cephalic" symptoms usually ascribed to this affection are dull headache, vertigo, numbness, confusion of thought, defective muscular motion, silliness or want of expression, impaired speech, partial or general paralysis, obscure or partial convulsive movements, rigidity, &c. When such symptoms occur either by themselves or in connection with any other affection, (meningitis, for instance) there is thought to be reason to suspect more or less active inflammation of the brain, and that its substance will be found after death in a disorganized or softened state. But such anticipations are not always confirmed.

Congestion—an early anatomical condition of meningitis—when existing by itself (if ever) may exhibit more transitory symptoms than a confirmed disease. There may be, perchance, less vomiting. Constipation may be accidental. Full pulse and other signs of plethora may be present; and, in general, the obscure indications of congestion may not unfrequently be referred to a distant and perhaps far different affection. But we must not expect tangible *post-mortem* proofs of congestion, as, from the nature of the case, our evidence of its previous existence must be mostly clinical. Dr. Gooch has given evidence to prove that heaviness of the head, and *drowsiness*, attributed "inveterately" to congestion, really depended, in his cases, upon a deficiency of nervous energy; also, that the state of the eye (dilated, motionless) resembling that resulting from *effusion*, as supposed, was in reality due to a deficiency in the circulation of the brain. Marshall Hall and Abercrombie have also described such anæmic cases, arising from derangements of the digestive organs.

Effusion, sometimes called *chronic hydrocephalus* when long a prominent symptom, can hardly be called an organic lesion, although often spoken of as such, but rather the result of a number of various and even opposite pathological conditions. Though the morbid change may be too slight or too obscure to be demonstrated after death in the parts containing the effused liquid, still simple *passive exudation* unpreceded by some such change, is hardly supposable, even on the loosest theory of functional derangement only. As effusion

into the chest is now ascribed previous to latent disease, however slight and unobservable its symptoms, so encephalic exudation must have a similar origin, though its occasion may be in a distant locality. Moreover, effusion is often only an attendant upon a moribund state—a mere closing up, it may be, of some remote affection (cholera infantum, for instance) —a mortuary result, not a previous complication.

Special symptoms as indications of specific organic conditions are, we fear, hardly worthy of the reliance often placed in them. *Dilated pupil* as an evidence of effusion; *contracted*, when fluid exists in large quantities at the base of the brain, or into the pons Varolii, are states not permanent in the same individual case, but often alternate from unknown or very slight causes. The *half-closed eye*, covered where exposed with mucoid film, thought by some to be a reliable diagnostic or disease of the brain, we recently found wholly delusive in a very marked instance.

Hemiplegia may depend, as asserted, upon a greater softening, or disorganized condition of one side of the cerebrum than the other, but every one, who has tried to prove this, will acknowledge the difficulty.

Paralysis may probably be attributed, with reason, to the giving way of the central portions of the brain, as is generally supposed.

Convulsions, on the contrary, are said to have their origin in causes affecting the surface of the brain; but their causes, various and apparently dissimilar as they often appear, may nevertheless produce similar cerebral disturbance, either through direct or reflex movements in the nervous system.

Convulsions are striking symptoms—symptoms only—of diseased changes taking place, perhaps within the cranium near the seat of their origin, or in other and possibly very distant parts of the body. Whatever may be the part of the acting nervous material of the brain-substance, which under an influence which we will call cerebral disturbance, for want of a better term, gives rise to convulsive agitations, it is not unlikely that this peculiar disturbance is brought about whenever any disease is accompanied by convulsions. To this disturbance, and not to any organic lesion necessarily connected with the disease in question, whether such disease be near the brain or far from it, we must ascribe these convulsions. Thus may be accounted for, not unphilosophically, the convulsive movements occurring in gastric as well as in meningitic diseases, and the fact also that these movements are not uni-

formly nor necessarily attendant upon any of such diseases. Thus, too, may be explained the temporary or paroxysmal characters of convulsions generally.

Taking such views, and remembering the greater nervous development and susceptibility in children than in adults, we may understand why a disorder or a disease, which in adults would ordinarily be ushered by *rigors*, may commence in children with convulsions—the convulsions as well as the rigors not indicating *the* disease, but only the coming on of some affection to be thenceafter made apparent.

So, also, when in the course of any disease, an increase or metastasis is taking place, and we have in adults a repeated rigor or marked delirium, we may expect in children an onset or recurrence of convulsions.

In all cases the convulsions must be considered as consequences of a disturbance in the acting material of the brain, and not the cause of the incoming, changing or rapidly increasing severity of the disease. In the one case they warn us to look out for an approaching or newly-arrived evil, of slight or serious character it may be; while in the other, in the course of any disease, they generally announce impending danger, not from themselves merely, but from an increase, or unfavorable advance, or complication of the affection then in progress.

Of the number and variety of the diseases or morbid conditions which induce or are accompanied by *convulsions*, every one in active practice must had sufficient experience.

Finally and generally, as the functions of the brain must depend essentially upon the peculiarities of the cerebral structure and not upon the membranes, any derangement of function implies a primary or secondary change in the acting nervous material itself. This change may not be any the less organic because we cannot discover it after death; but we should not forget that the symptoms of such change, cerebral symptoms, are not due, as essential elements, to affections or organic lesions in other textures, however near or distant they may be. Inflammations or diseases of the investing membranes of the brain itself may exist without inducing cerebral symptoms, but the connection between the meninges and the brain-substance is so intimate, and their integrity so important, that disease in them is probably more likely to prove the occasion of cerebral derangements, though such are as truly secondary as when arising from other and remoter affections. —*Boston Medical Journal.*

THE ALCOHOL QUESTION.

By DANIEL HOOPER, B. A. & M. B.

How do alcoholic liquors act on the human body—as foods or as poisons?—and is their regular and moderate use beneficial or injurious? These are questions to which our most eminent physicians and physiologists give contradictory answers, and the intelligent and reading classes appeal to them in justification of their habits of indulgence or abstinence; they take or avoid alcoholic liquors systematically, and on principle, and the practice in either case is based upon a scientific truth or a scientific error. It is therefore of the highest importance, both for the sake of the public health and of science, that those to whom we naturally look for guidance in these matters should come to some definite and determinate conclusions on the alcohol question. What can be more deplorable than the fact that the medical profession is divided into two distinct schools on this subject—the one represented by Dr. Carpenter, the other by Dr. Todd, Dr. Chambers, etc.? By one school, alcoholic drinks are regarded as *food*, by the other as *poison;* by one as a regular, daily, and useful, if not necessary, part of man's sustenance; by the other as powerful medicinal or poisonous agents, only useful, like those of the apothecary, under certain rare and peculiar circumstances. One school would place them in the same category as salt, sugar, butter and tea, as articles of ordinary domestic consumption; the other would range them on shelves, in company with laudanum, salt volatile and chloroform. These facts prove that a deeply-rooted fundamental creed as to the action of alcohol upon the human tissues lies at the bottom of, and gives its peculiar tinge or complexion to, each of these schools; and until this action of alcohol upon the tissues and vital functions is finally settled and agreed upon, it is impossible that the teaching of men of science and the practice of the public can be, as in the case of meat and bread, unanimous and satisfactory.

It is extremely difficult to determine, with accuracy and precision, the mode in which any agent affects the bodily tissues and functions, but experience and experiment, induction and deduction, chemistry and physiology, enable us, in many cases, to arrive at the truth, or an approximation to it; and,

consequently, there is at the present day a tolerable, constant and unanimous belief respecting the *modus operandi* of a considerable number of dietetical and medicinal agents, and it is much to be lamented that two totally opposite and contradictory beliefs should exist on a subject of such vital importance to the public as that of the action of alcoholic liquors upon the human body. I do not pretend to be able to settle this great and difficult question, but I shall endeavor, by quotations from high authorities, as well as by observations and reasonings of my own, to exhibit fully and clearly its present state, and thus to render its solution easier and less distant.

Alcohol appears to seek out and fix upon *nervous* matter, and to act directly and specially upon it, just as other agents localize themselves in particular organs. Dr. Todd regards alcohol as a *food*—Dr. Carpenter as a *poison*—to nervous matter; both, however, agree that it acts upon the nerve-cell and fibre *directly*, and upon the encephalon almost to the exclusion of the spinal cord. "So far as it influences the nervous system," says Dr. Todd, "the action of alcohol is that of a stimulant—an unfortunate term, indicating a distinction without a difference; other forms of food are likewise stimulant, but as they do not act directly and quickly upon the nervous system, their exciting properties are not so apparent. In like manner, alcohol possesses its stimulating property, because it is a form of aliment appropriated to the direct nourishment of the nervous system, and to its preservation; its special adaptation to this system gives it an immediate exciting power superior to any other kind of food." He further says, that alcohol, even when taken in excess, does not produce inflammation of any organ, but that its bad effects are shown in the nervous system; it damages the nutrition of the nervous matter, poisons the nerve-fibre and nerve-cell, and produces anæmia of the brain. Waste of nervous matter is indicated by tremblings and impaired mental power, and these symptoms may be caused by mental anxiety, fatigue, or sexual excesses, with or without the use of alcohol. Todd contends that the proper and moderate use of alcohol repairs and envigorates the nervous system; in short, he regards it as "*its appropriate pabulum*," or food; if given beyond what is required in the treatment of disease, he says it will be exhaled and perceptible in the breath; not so, if the quantity be proportioned to the wants of the system. Dr. Marcet, in a book entitled "Chronic Alcoholism," has very well described the effects of the habitual and excessive use of alcohol. The

symptoms, he says, may appear during the indulgence, or long after the discontinuance of the bad habit, and are these: Headache, vertigo, unsteady gait, tremors, musæ volitantes, ringing in the ears, deficiency of what the French call "aplomb," nervousness, sleeplessness, night-mares, frightful dreams, weakness in the loins, hips and knees, inability for exercise, and weakness of intellect and memory. The same or similar symptoms may arise from other causes besides alcohol; such as mental anxiety, excessive intellectual toil, sexual excesses, inordinate smoking, etc., all which, in common with alcoholic excesses, exhaust or waste the nervous matter. Dr. Todd, as I said before, regards alcohol as the proper pabulum of the nervous, in the same sense as albumen is the appropriate pabulum of the muscular tissue. Carpenter, on the other hand, endeavors to show that alcohol is essentially destructive, of nervous matter; he contends that it only stimulates the brain and nerve as the spur does the horse, and that this stimulation wastes and destroys it, so that in the end, and on the whole, it will be in worse condition than before, and will require time and repose in order that it may be fed and repaired by blood containing what he considers to be its appropriate pabulum—viz: phosphorized fats, albumen, etc. If every act of the mind, every thought and emotion, wears away some portion of the nervous matter, just as every muscular contraction wears a part of muscular fibre, it is evident this must, in both cases, be restored in some way. Now Carpenter contends that alcohol cannot, and does not, restore nervous matter, but that it only stimulates the wasted and jaded brain and nerves to further efforts—that is, in fact, it acts upon them as the whip or spur does upon the jaded horse, making them work at the expense of still further wear and tear; so that alcohol, on this view, is a sort of suicidal instrument to the nervous system, goading it on to its own destruction. What then, can and does repair nervous waste? Dr. Todd would answer, "Above all things, *alcohol*." Dr. Carpenter would reply, "Certainly *not alcohol*, but rest, sleep, and a blood containing the proper pabulum of nervous matter—fats, albumen, etc. No doubt there are many agents which all the world admits, *do* repair nervous waste; such are tea, coffee, fresh air, recreation, sleep, and good food, about which there exists no sort of doubt or question; but good reasons ought to be given for excluding alcohol from the category. Now, of tea, coffee, exercise, study, sleep, etc., we may affirm, that used within certain limits, they stimulate,

strengthen, nourish, and repair the nervous tissues; and that beyond these limits, they weaken, depress, and waste it. May this not be asserted, also, of alcohol? Dr. Carpenter argues that alcohol cannot ultimately benefit nervous matter, because it is incapable of regenerating it—i. e., of becoming its material pabulum, or food; but no one questions the benefit of tea, coffee, moderate study, sleep, and recreations; and yet we have no reason to suppose that they, *per se* and directly, contribute the most minute particle of matter to the brain and nerves.

In studying the physiological action of alcohol upon the human body, we must never forget that it is one of that large class of agents whose influence varies, not simply in amount, but kind or quality, according to the quantity administered; so that the effects of a large dose will be, not a mere *multiple* of those of a small one, but of a totally different character. In some few cases, as those of lying or stealing for instance, quantitative difference does not produce qualitative difference; but in the majority of cases it does. A certain temperature produces ice—a higher one steam; a certain weight bends a spring—a heavier one weakens it; a few hours' study may innervate the brain—a few hours more will enervate it. And may not, also, a certain amount of alcohol, tea, coffee, etc., strengthen the nervous system, and a larger one weaken it? Or is alcohol mischievous in all proportions, whilst tea, coffee, study, etc., are not so? Cause must be shown why alcohol is to be excluded from the class of agents which do good in moderation, and harm in excess.

Is alcohol a *food* or a *poison?* This question is still an open one; the end and aim of all food is force; food is finally converted into force, which may be regarded as its true definition, and almost as its equivalent, convertible, and equipollent term. In this sense, alcohol, tea, study, exercise, oxygen, may all be regarded as food, for they all give force although they probably do not, directly, and *per se*, furnish any material pabulum to the brain and nerves. Alcohol, however, may possibly do so, (as we shall see in another place,) and may, therefore, be regarded as a more real food than the others. Moderate exercise of mind and body is a generator of force, and the indirect means of imparting growth and strength to the brain and muscles. But alcohol is more really and strictly a food than any such agent as exercise; for all material food is either plastic (tissue-making) or respiratory (heat-making,) and alcohol is a most excellent respiratory or calorific food,

for it is far more digestible, and far quicker in its action than starch, fats, and sugar, and is at once absorbed by the vessels on the walls of the stomach; consequently, where time is an object, as in cases of fainting, or of collapse from accidents, alcohol possesses a manifest advantage over the more solid and slowly-acting hydro-carbons. Even Carpenter admits the rapidity of its action; but he objects to its employment except in cases of emergency. He says, "Alcohol is the quickest in its action of all the hydro-carbons, but others would be equally and more permanently efficacious, if time were only given them to act. In some exceptional cases this *time* cannot be given, and then alcohol is indicated." He also says, "Alcohol, by presenting itself first for combustion in the lungs, prevents the other carbonaceous matter of the blood (supplied from food and other sources) from being burnt off in the lungs; these, consequently, are thrown upon the skin, liver, and kidneys, which organs are very likely to suffer in the performance of this extra duty." All writers agree with Moleschott, that "wine saves the tissues from being burnt, by offering itself as a fuel;" and the most recent experiments of the eminent physiological chemists of Germany have completely established this truth; that alcohol, (in common with tea and some other agents,) by preventing the waste of the tissues is, if not a real and material pabulum, at least an equivalent to it, a diminution of expenditure being, of course, tantamount to an increase of income. It is objected, that alcohol is only a temporary stimulus; that the force generated by it is only temporary. But this is not a valid objection, since all stimulus, all force is temporary; food, fresh air, exercise, are all stimuli, or generators of force, but are temporary in their action. Life is only possible under incessant stimulus. Tea and coffee are called "agreeable and refreshing" stimuli; why should the stimulus of alcohol be called noxious? What is there peculiar in the alcoholic stimulus that demarcates it from all others? If a moderate quantity of tea be taken, the effect is agreeable and refreshing; but if taken in excess, the effect is disagreeable and enervating. We may say the same precisely of a mountain walk; neither of these stimuli leaves the body in a worse condition (but, on the contrary, a better) at the expiration of five or six hours, than it would have been without it. Dr. Chambers applies this test (which seems to be a very fair one) to alcohol, and contends that if an individual finds himself better able to perform all the duties of life during five or six

hours' interval of his meals with and without alcoholic stimulants, then they are good for him; at the end of this interval, if alcoholic liquors agree with him, he will feel more cheerful and vigorous than he would have felt if he had not taken them.

In the case of poisons, or alcoholic excesses, this average interval of five or six hours would be one of misery, and before its expiration the poison or the stimulus would demand imperatively either a remedy or a repetition.

All physiologists agree, that every mental effort wears away a portion of nervous matter, just as every muscular effort destroys and removes the muscular fibre. This being so, the lost matter must, in both cases, be restored by the blood, unless a totally different law obtains in the two structures, which is improbable. Now, we know that the muscular tissue is repaired by the albuminous matter of the food existing in the blood. What part of the food, then, is it which, entering the blood, repairs, restores, or builds up the effete nervous matter? Phosphorous, oils, and fat constitute a large portion of the nervous structures; and alcohol, being a hydro-carbon, is chemically allied to these components of nervecoll and fibre. But what is its precise action upon them? Is it a real pabulum? Does it nourish them, directly and materially, and build them up, in the same sense as albumen does the muscular tissue? Or does it merely affect them after the manner of study, or cheerful amusement, without imparting anything to them of a real and substantial character? Or, lastly, does it simply quicken the circulation, and so send a larger amount of blood to the brain and nerves in a given time? These and similar questions have yet to be answered before the subject of alcohol can be well understood.

My own observation and reflection may lead to believe that alcohol drinks are highly useful, if not necessary, articles of regular, daily consumption, for vast numbers of persons; but that their kind and amount must be determined by age, sex, constitution, mode of life, and other circumstances. I believe they are more necessary for those whose avocations involve head-work, anxiety, and wear and tear of the brain, than for such as lead a comparatively animal life, or one of mere bodily labor. And I think it will be found that the degree of refinement of alcoholic liquor required is in tolerable exact ratio to the expenditure of brain-powder. The agricultural laborer, for example, is satisfied with ginger-beer, or very poor home-brewed beer; clerks and shopkeepers with bitter ale; and

barristers, judges, and members of Parliament with wine. In fact, we find a gradation of brain-work corresponding pretty exactly to that of the refinement and alcoholic powder of the liquor habitually and instinctively made use of. On the continent, also, we see illustration of the same fact—the strength and refinement of the wines consumed, gradually rising with the exaltation of the brain-work of the consumers. Nor is it owing, as might be supposed, entirely to difference of rank or pecuniary resources; for every man finds the same fact illustrated and corroborated in his own experience. We all find, when on our tours in Switzerland or the Highlands, where we enjoy pure air, good food, and rest and recreation of brain; when, in short, we are living an animal rather than an intellectual life, we care nothing for, and do not require any sort of, alcoholic liquor; whereas, when engaged in our profession or business in London, in the midst of bad air, noise, hurry, bustle, competition, and excitement, we are conscious of an unmistakable craving for a certain amount of alcohol with our daily food; the reason being that, in the one case, we are doing everything to refresh and fortify, and in the other to exhaust and wear out, the nervous system. This fact goes far to prove that alcohol, in some peculiar but as yet unexplained way, *does* repair nervous tissue.

In estimating the value of alcohol, the experience and testimony of healthy persons who use it habitually, and in moderation, ought to be taken into account; also the fact that all ages, and in every corner of the globe, man has discovered a method of preparing it. There are persons who do very well without alcohol; but this is no proof that it is useless to others. There are country districts where the laborers are healthy and strong without meat, and with beer almost as weak as water; but does it follow that the same fare would suit the London lawyer, barrister, judge, or member of Parliament? No, the two cases are totally different. Men whose labor resembles horses may and do live, like horses, upon corn and water; but those who are calculating, thinking, and reasoning, twelve hours out of twenty-four, require a more refined sort of food and drink. A ploughboy will look fat and rosy upon his bread and cabbage and hard pudding and water; whilst a Gladstone will require, besides these, good animal food, tea, coffee, and an alcoholic liquor of great purity and refinement. If the brain-work of the London clerk demands a supply of Bass's ale, that of the working statesman will require something approaching œnanthic æther!

Two arguments used by total abstainers require a short notice. They maintain that alcoholic liquors cannot afford any real and permanent benefit, because they contain little or nothing of a solid nature (as proved by evaporation to dryness.) But if this proves the worthlessness of wine, so does it of tea and coffee. The fact is, experience has proved that all these agents, in spite of their unsubstantial nature, do refresh the wearied brain and nerves, and impart new life and health and spirits. Exercise, fresh air, study, tea, coffee, and segar smoke, are all devoid of solidity; but the argument that they are therefore incapable of imparting anything to the human body is still more so. On the contrary, we know that exercise does add bulk and weight and substance to the muscles, that fresh air does redden and enrich the blood; that recreation and study do nourish the brain and nerves; that tea, coffee, and alcohol, do, at any rate, prevent waste of the tissues (and probably also directly nourish the nervous system,) and that moderate smoking, by soothing and calming the over-busy and excited brain, prevents its exhaustion and waste; in short, some of the least material agents have the most real, powerful, and beneficial influence upon the human body. Again teetotalers contend that, in the case of alcohol, it is impossible, to define moderation and excess, since what is moderation to one man is excess to another, and vice versa; but this is equally true of salt, tea, sugar, coffee, and many other things, moderation and excess in which they regard as tolerably well defined by common consent. The truth is, there is a certain recognized standard quantity of alcohol, salt, tea, sugar, coffee, etc., which all men agree to call moderate, and the difficulty is not greater in the case of alcohol than of any other article of daily consumption. The man who eats a leg of mutton at a meal, or consumes a pound of salt, or drinks a gallon of beer per diem, is looked upon by the public as a monstrosity, an exception, a wonder, whilst he whose daily consumption is one sixteenth of these several articles is regarded as an ordinary individual—a type of the masses; in short, the excessive and the moderate man are as well known and as easily recognized as are any of the types and their deviations in the animal and vegetable world. It is idle and absurd to pretend that the boundry line between moderation and excess is indefinable. I believe every man knows where it is, and when he has overstepped it, even although, from long habit and sensibility, the transgression may have little effect upon him. The soldier's rations and

the diet-lists of great hospital, are so many proofs that there is a standard in these matters, well understood, and that public institutions, in their dietetical arrangements, do not contemplate or provide for monsters who eat a leg of mutton or drink three gallons of beer per diem.—*London Lancet.*

SYPHILIS DURING PREGNANCY AND LACTATION.

Section 285 of "A Text-Book of Midwifery," by Dr. Carl R. Braun, Professor of Midwifery, etc., in the Imperial Hospital, Vienna. Translated by BENJAMIN LEE, A. M., M. D.

Women suffering from secondary syphilis during pregnancy usually infect the fœtus and the peripheral portions of the egg through the medium of the blood. The egg consequently perishes, and is prematurely expelled. Many cases of habitual abortion are to be explained in this manner.

Should the fœtus withstand the infectious influence of the mother until the second half of pregnancy, it then does not usually die, but is often prematurely born, giving evidence of its syphilitic heritage at birth by a puny frame, a dirty, smoky, mouldy skin; by vesicles of pemphigus on the palms of the hands and soles of the feet; by round, copperish-red spots or scars on the same surfaces; by condylomatous growths at the points of transition from cuticle to mucous membrane; and by ozena, or nasal catarrh. Such children generally die in the course of the first few days.

On examination after death, evidences of congenital or hereditary syphilis are often found, sometimes in the shape of collections of pus, of the size of a filbert, in the thymus gland, the lungs, the kidneys, or the testicles; sometimes as areolar growths in the liver. These, however, are in many cases absent. Any one who will take the trouble to examine the bodies of a number of fœtuses suspected of syphilitic infection, can readily satisfy himself of the frequency of these alterations in the various organs.

As to the connection between hereditary syphilis and the degeneration of the thymus and liver, noticed by Dubois,* I have had several opportunities of convincing myself of its reality, in company with Wedl,† Dittrich, and others. We

* Dubois, *P. Gazette Médicale*, 1850, No. 20.
† Wedl's *Pathol. Histologie*, S. 359 and 519.

usually found in the corresponding lobes of the thymus several cavities filled with a purulent fluid, or a large central cavity, containing, like the former, a turbid, yellowish fluid. This fluid did not contain the well-known gray uncleated elements which, on being treated with dilute acetic acid, exhibited the characteristic nuclei of pus-corpuscles; in the intercellular fluid, elongated threads of mucus also came into view. In the more consistent portions of the walls an exquisite variety of cellular tissue was met with.

In the liver were found cellular growths of a more definite form. In one case, a rounded tumor of the size of a bean, and tinged with yellow, projected slightly from its concave surface, with edges not distinctly defined, but shading off into a brownish-yellow, and finally, into a liver-brown color. The lighter-colored portion of the growth extended to a depth of about the third of an inch. On section, its centre was found to be intensely yellow. The consistence of the imbedded mass was generally very perceptibly denser than that of the surrounding parenchyma; to the touch it was irregularly granular; on pressure, only a small quantity of turbid fluid could be expressed. The softer parts of the new formation consisted principally of cells of the most varied forms, presenting one, two, three, or even four processes, and containing one or two nuclei of an oval form, in each of which was found one nucleolus. The nuclei were eccentric in position, and when double were often in close proximity; but in certain cases, and especially in that of the hour-glass cells, were situated at the two expanded extremities, at a considerable distance from one another.

The fusiform cells, varying greatly in their transverse diameters, were arranged upon one another, as usual, in obliquely ascending layers. The denser portions consisted mainly of fibrous fascicles. The remaining substance of the liver offered no striking anomaly.

Another phase of these cases is that in which gestation is not interrupted by the syphilitic poison; the fœtus matures and is well developed, and the child presents at first not a single symptom of syphilis. The sanitary condition of such children, however, usually presents a sad picture, when, at a later period, hereditary syphilis, scrofula, or rickets manifest themselves. Women affected with secondary syphilis, whether its evidence be confined to the skin, the mucous membrane, the iris, the bones, the cartilages, the glands, the muscles, the areolar tissue, or the internal organs; or whether its impress

be stamped upon all these parts of the economy at once, abort very frequently, or give birth to dead (macerated) or miserable living children. Or if they perchance bring into the world mature and apparently healthy offspring, the hereditary disease shows itself in the course of a few days or weeks. A determination of the two following questions is therefore of great importance in practice:

1. Are the condylomata of pregnant women ever an indication of constitutional syphilis? and if so, what particular forms of them?

2. Are vaginal blennorrhœas ever an indication of venereal disease? and if so, what forms of them?

Condylomata occurring in connection with other symptoms of secondary syphilis, as for example, the syphilides, enlargement of the glands in the region of the neck, and the flexure of the elbow, ulcerations of the throat, and indurated chancres, usually, indeed, communicate the disease to the child during pregnancy. But, with regard to condylomata occurring in women who appear otherwise entirely healthy, presenting no other trace of secondary syphilis, there still exist wide differences of opinion. They are supposed by some to be specific, by others non-specific. Many number the pointed condylomata with the latter, and the broad with the former variety. It is considered by a large number of writers that they occur only secondarily, as a product of chancre, and are contagious; by another school, that they are the result of both chancre and gonorrhœa; and further, there are those who suppose that they occur primarily and without the precedence of any syphilitic symptoms, and are therefore inoculable and contagious.

The opinion that the pointed condylomata are simply the result of maceration of the epidermis or epithelium by a blennorrhagic or seborrhagic section, has its supporters, while the so-called subcutaneous or endofollicular condyloma is justly said by many to result from neither syphilis nor gonorrhœa, and hence, of course, to be non-contagious.

With so extensive a diversity of views, it becomes of the greatest importance to the gynecologist to adopt a definite opinion on the nature of the growths, in order to be able to shape accordingly his treatment of women affected with them during pregnancy, and of their children during lactation.

Simon,* of Hamburg, has published the following very important propositions with regard to them, which my own observation leads me to sustain. He says:

* Simon, Ind. spez. Path. and Therap. Red. Virchow, Bd. II, Abth. I, S. 421.

"There is, in point of fact, no reliable diagnostic sign between syphilitic and non-syphilitic warts. *The greater proportion of such growths in the anal and pudendal regions are probably of an infectious nature*, as they doubtless were before the outbreak of the venereal disease. They are hypertrophic growths of the submucous and subcutaneous cellular tissue; dry where the epidermis is thick, moist where it is thin or wanting, (*plaques muqueuses*,) and vary in form with their situation, being broad and symmetrical about the anus, and pediculated in the vagina and at its mouth."

It is extremely improbable that condylomata occurring during pregnancy in the neighborhoood of the genitals, depend simply upon the chafing of the epidermis or epithelium, for we find profuse leucorrhœa in fifty per cent. of women during the second half of pregnancy, producing redness, chafing, and even excoriation, and yet never exerting even the slightest injurious influence on the development of the fœtus, or infecting the child with gonorrhœal ophthalmia during labor, or inducing specific eruptions after birth; while, on the other hand, condyloma, in all its varied forms, is met with only in one per cent. of the women in lying-in institutions, and still more rarely among married women.

The condyloma of pregnancy must therefore be produced, not simply by a leucorrhœal secretion, but by some peculiar element of this secretion; and we may safely say that every condyloma occurring on the genitals of pregnant women justifies a suspicion of syphilis, or of some one of those hybrid poisons; and also that it may lead to symptoms of hereditary disease in the child, as has been established by my own investigations.*

Friedinger's† proposition that "children born of mothers affected with pointed condylomata (primary syphilis) are never infected by the poison," cannot be received as an axiom, because his observations extended only to the third month, while hereditary syphilis may break out even after vaccination has run its normal course, and subsequently to the limit fixed by him. As regards the relation of this subject to medical jurisprudence, the following representative dogmas of Diday,‡ and, to some extent, of Hebra, Sigmund,

* Braun, C. Zur Syphilis Congenita, Œster, Zeitsch. f. Kinderheilk. Wien. 1858. S. 201.

† Fredinger, Ebenda, S. 225, und Wiener Ges. Z., 1854, V.

‡ Diday, Traite de la Syphilis de Nouveau-nes et des Enfans a la Mammelle. Paris, 1854.

Friedinger, Wertheimber,* the author, and others, on the *transmissibility of syphilis in pregnant and nursing women to the child*, are of the greatest imporaance.

1. If the father presents symptoms of the syphilitic diathesis at the time of coition, the child will undoubtedly acquire them.

2. If the father has been infected at some previous time, but at the time of coition presents no symptoms of the disease, the child may possibly, but not certainly, escape.

3. On the same principle, the influence will certainly make itself seen if the father be in the interval between two consecutive outbreaks of constitutional syphilis, or between an attack of the primary affection and the subsequent appearance of the general symptoms at the time of connection.

4. It may also occur, if a diseased man cohabits with a healthy woman during pregnancy, without the latter showing the slightest evidence of the existence of the affection.

5. The mother implants the disease in her offspring, either by the production of an ovum, which has become diseased in consequence of the constitution vice, or if not herself infected until after conception, through the medium of her morbid blood; for if a widow, whose deceased husband was infected, contracts a marriage with a perfectly healthy man, the children by this marriage may evidence most unmistakable traces of the affection; and further, if a healthy woman suckles the syphilitic child of a stranger, her own subsequent offspring may feel the pernicious effects of her incautious kindness.

6. A mother affected with the secondary symptoms at the time of conception may transmit the disease to the child, while the father is perfectly healthy, and has never been syphilitic.

7. A woman who has taken the disease during pregnancy may transmit it to the child between the second and the seventh months; whether this be possible at an earlier or a later period is at present doubtful.

8. In a marriage where only one of the parties is syphilitic, all the children are not of necessity affected. It may even happen that only one of twins is born with the seeds of disease in its system. This appears to depend upon some preponderating influence of one or other of the parents. If both parents are syphilitic, the child is usually born with the marks of disease upon it. Hereditary syphilis begets scrofula only in the presence of certain conditions, viz: the fact that both

* Wertheimber, Ebenda, S. 145.

parents at the time of coition were in the third stage of the disease; that the constitution of the child, or of either of its parents, is lymphatic; that the child has been nourished entirely upon its mother's milk; or finally, that the anti-syphilitic treatment was not adopted at the proper time.

9. Syphilis can be communicated to the mother through the fœtus. The transmission here takes place through the blood, and corresponds to the infection of the fœtus by the father, while the mother is healthy.

10. The immediate communication of syphilis to the child (from a primary sore or virulent vaginal discharge during labor) is, in the opinion of most gynecologists and syphilographers, rare. For this there are two reasons: first, that primary sores are rarely found in the advanced stages of pregnancy; and second, that it would necessitate the prolonged contact of a particular part of the fœtus with the surface of the ulcer, or the presence of an excoriation on its skin, and the partial absence of the *ver nix caseosa.*

11. In sucklings, the infection occurs either through an infectious point on the skin of the nurse, or from the diseased milk. Generally it is first communicated from a child to the nurse, whose nipples then become the seat of condylomata, and in turn transmit it to another child.

12. Although, in the opinion of Diday, Simon, Baumes, Cullerier, and Vidal, it has been demonstrated that infection of the suckling may occur through the medium of the milk, still they allow that the affection is in such cases milder, the eruption appearing later, and often manifesting itself under the form of scrofula.

13. A woman who has given birth to a syphilitic child runs no risk of infection in nursing it, from the fact that syphilis does not occur twice as a constitutional disease in one and the same individual.

14. The passive infection of nursing women usually results from mucous tubercles in the mouth of the suckling; these being among the earliest manifestations of syphilis in the newborn, and pouring out a very abundant secretion.

15. The demonstration of the actual transmission of syphilis from the nurse to the child, in any particular case, is surrounded by difficulties. The nurse may have been cured previous to the time of the examination, and no trace of the disease be left upon her person; or if there be evidences of it, it is supposable that she may have been since infected by another child; or the child may have become diseased through the

medium of the milk, although the nurse has had no visible in dication of its existence in her system; or the child may have been infected by another person; or finally, a small syphilitic scar upon the nurse might easily escape the scrutiny of the physician.

16. The syphilis of the new-born is, under very favorable circumstances, transferable, although not always inoculable.

17. If the virus of a primary sore be introduced by inocu lation at the same time with vaccine virus, a hyaline vesicle is formed, which ruptures on the fourth day and developes the syphilitic ulcer; the vaccine lymph, however, is vitiated, the regular pustule not forming until the eighth day, according to Sigmund, and, as Friedinger's investigations would show, not even then.

18. Vaccination, if it runs its regular course in a child affected with latent syphilis, induces a more speedy manifestation of the latter. There are cases, however, in which it does not show itself for a considerable period after vaccination.

19. Rickets, in its various grades and modifications, is a not unusual termination of hereditary syphilis, where it has not been recognized and treated as such.

20. Condylomata rarely, almost never, induce constitutional syphilis in pregnant women, and, save for their obstinacy, admit of a tolerably favorable prognosis. They are, however, extremely dangerous to the fœtus. The poison interferes with embryonal development, attacks all the most essential organs, and in the new-born enters the great mass of the circulation, without any diminution of its virulence by the action of the lymphatic system.

Physicians are still divided in their opinions as to its treatment during pregnancy, from the alleged fact that a mercurial course may kill the fœtus and induce abortion. This apprehension, however, we do not share, and to our mind the method proposed by Simon appears perfectly rational. He says: "Inasmuch as pregnant women, suffering from any well-marked syphilitic affection, usually abort in the second half of pregnancy, gestation cannot justly be considered to contra-indicate treatment; on the contrary, a judicious anti-syphilitic course may preserve the life of the fœtus. Only when confinement is very close at hand may it be more judicious to employ, for the time being, means which are merely palliative, not commencing the radical treatment until after the end of childbed.

"That mercury exerts an injurious influence on the fœtus is

true only in so far as it perhaps somewhat dwarfs its growth, while syphilis, on the other hand, destroys its life."

It is not advisable to employ either decoction of sarsaparilla or iodide of potassium in place of mercury during pregnancy, the stomach and intestinal canal being too irritable for these remedies; the latter of which might, in addition, exert a very equivocal abortive tendency upon the vascular activity of the uterus.

The mildest preparations of mercury are those best adapted to the pregnant condition; externally the mercurial ointment in small quantities, and blue pill or calomel, with opium, internally. The corrosive chloride may prove poisonous to the fœtus, and cause abortion.

If a woman suffers from primary sores on the genitals during the later periods of pregnancy, an attempt must be made to heal them if possible, in order that the child may escape infection during labor. At the same time, irritating or corrosive applications should not be made, preference being given to such mild agents as lime-water, lead-water, or a decoction of cinchona combined with a little sulphate of zinc and opium, as powerful escharotics may readily induce abortion.

Condylomata, seated in the mouth of the vagina, requires during the last three months a very cautious expectant treatment. They frequently grow with rapidity in this situation, obstinately resisting every remedy, and yielding only to cauterization, by which, however, the fœtus is not in the slightest degree benefited, and premature labor may be produced. During, or soon after childbed, these growths either die of themselves, or soon disappear under the topical employment of the *aqua phagœdenica* of the older writers, or some other stimulant lotion. Both ulcers and condylomata should be touched during the progress of the labor with nitrate of silver, and coated with collodion or cerate; injections of oil should be thrown into the vagina, and the child should be most scrupulously washed, especially about the neck, where the skin is thin and exposed. Every excoriation upon its surface should be touched with nitrate of silver, and any subsequent infection from the mother should be most carefully guarded against.

The mother may be permitted to nurse her child for a few weeks, should it seem requisite, provided that her affection be of a mild form, and she be not otherwise incapacitated; for if her blood were capable of building up the fœtus to maturity, her milk ought to be fit to nourish it. As a rule, however, artificial nourishment is to be preferred after the third week.

Should a mother affected with constitutional syphilis be unable to nurse her child, on which naturally rests a suspicion of syphilitic taint, it must not, even though apparently healthy, be given to another woman to nurse, inasmuch as the congenital affection often does not make its appearance until quite late, and may infect the nurse through the nipple. If, however, a nurse be found willing to run the risk of infection from her apparently healthy charge, and to undertake the business of suckling it, it becomes the duty of the physician to acquaint her with all the possible consequences that may result from such a course. The children of women affected with syphilis or condylomata must generally be artificially nourished, whether at home or in foundling hospitals, and for this purpose cow's milk answers every requirement. Only in the case of very puny children will it be necessary to keep a goat. The mother should be subjected to an anti-syphilitic treatment during lactation, in order that the taint may at the same time be eradicated from the nursling.

Inunctions of from five to ten grains of mercurial ointment on alternate days are well adapted to the treatment of the child; or, should it present actual ulcerations upon the surface, the sixth of a grain of blue mass in some mucilaginous vehicle, or still better, the third of a grain of calomel, may be administered daily until the disappearance of the affection, and then suspended for a considerable length of time, in order to avoid its more advanced results. The painful ulcers will heal very rapidly under the use of frequent applications of *aqua phagedænica*,* with opium.

If habitual abortion results from latent syphilis on the part of one of the parents, the suspected party must be subjected to a mercurial course. In subsequent pregnancies, mature and vigorous children will generally be produced as a result of this mode of treatment.—*Am. Med. Monthly.*

* Aq. phagedænica is a solution of chloride of calcium, holding in suspension a small amount of bichloride of mercury.

CRITICAL REMARKS ON THE DISEASE OF COUNT CAVOUR, AND ITS TREATMENT.

BY STEPHEN ROGERS, M. D.,

Late Surgeon to the Panama Railroad Company; Licentiate of the Royal University of the Havana (Cuba) Medical Department, etc., etc.

The subject of the untimely demise of the great European statesman, Count Cavour, and of the professional discussions *pro* and *con* upon the medical management of his fatal disease, have been worn well-nigh threadbare by both the medical journals and the newspapers all over the world.

Europeans, perhaps, have come to some conclusion satisfactory to themselves in the affair; and the profession on this side of the ocean, very likely, have, as a general thing, concluded that at this distance and with the indefinite accounts received, we have little data for a well-founded criticism upon the professional behavior of the Count's physicians during, and of their scientific treatment of, his last illness. I confess to have been one of this generality up to the time of the appearance in your journal, of the translated clinical report of Count Cavour's last sickness and death, from *L'Union Medicale*, by Dr. Deslandes. To the American physician, particularly if he has seen much of miasmatic disease in the tropical regions of this continent, or in those sections bordering upon the tropics, and to the young men who are just starting in their career, and who may be thrown into these regions, this clinical, and as stated *reliable* report, must, it appears to me, prove a very curious, interesting, and—as I hope to make it—a very instructive and useful one. Let us commence, then, with the first important point touched upon by the report, viz: the habits of life and occupation of the patient. His mental labor, it is stated, had been for many years excessive, particularly during the last two years, a manner of life well known to be inconsistent with a high grade of animal vitality, and a fact which should have had more respect shown it by the physicians who treated his disease. With this preparatory information, it is no matter of surprise that gout should have troubled him occasionally, nor that he should so long ago as years prior to his death, have had so much trouble to get rid of an intermittent fever as the report states he had. The fact of his not having suffered any "serious or long disease,"

cannot necessarily interfere with these conclusions, for one's *vis medicatrix naturæ* is not by any means shown by a long exemption from disease, irrespective of circumstances.

Expose an individual to causes of disease, to which every body about him, as a rule, yields, then if he escape, it is very safe to accredit him with an extraordinary amount of vital protective force, or in common language, with a fine constitution. Count Cavour, so far as we know, was never thus accredited. On the contrary, we have the statement, that he threw off disease badly, in the history of his long battle with the intermittent fever of six years before. This is the most reliable means of estimating vital force and strength of constitution, viz: the promptness with which disease is thrown off, and with which the system recovers from its effects. With the light of these truths before him, any observing physician could not but have taken the patient in question, as a case requiring cautious and perhaps sustaining treatment, rather than the routine medication and haphazard depletion which we shall see he was subjected to. We now come to the—strictly speaking—commencement of the disease, which finally terminated so unfortunately, viz: the frequent attacks of colic, which are said to have troubled him for about a year prior to his final colic, which we shall hear more of presently. Although purporting to be a clinical record of what actually took place, a more indefinite, objectless, and unsatisfactory collection of words, cannot be conceived of than this paragraph. Absolutely nothing of import is communicated, except perhaps that he had little confidence in his physicians, which we may yet see reason for thinking was not at all strange. We are told that "for about one year he had been complaining of very sharp colics, coming on at night usually, and which *he* treated by *one* or *two* bleedings." Not a word is said of the accompanying symptoms; if there were headache, febrile state of the skin, peculiarity of the pulse, coolness or blueness of the surface; or if these attacks passed off without either heat or perspiration, or if they observed any kind of periodicity in their nocturnal attacks. And if so, whether they were quotidian, tertian, or quartan attacks; nor of the intervals between the attacks. But fortunately, a little further on, we find what may help us to a solution of the doubtful points. "On the 29th of May," says the report, "in the evening, he was *again* seized with colic." This expression leads us to the conclusion, that this seizure was not unlike, if it was not precisely like the previous ones, which we have

just seen he had suffered for a year, more or less. Here also we are left in complete ignorance as to any attending phenomena of the colic, if there was any headache, any peculiarity in the condition of the skin, pulse, or temperature. Almost as if by accident, we are finally told, that some time the following day "*the fever being intense, it was thought necessary to bleed him again* TWICE."

After the bleeding, which had now been practiced three times since his attack of the previous evening—and which really seems to be the object of the report to record—we know nothing of his symptoms, till the morning of the 31st, at least thirty hours after his seizure by the colic. It may have been thirty-six hours. He was then in the language of the report, with the "apyrexia complete." Here also occurs a statement, which fixes in my mind a deep conviction that the Count's physician, however meritorious a man, was utterly worthless to him as a medical adviser. It is this: "M. de Cavour, thinking himself cured, acted accordingly." I also take it as giving another key to the hidden history of his previous colics. It seems to say that he had suffered similar seizures frequently, and they had terminated as this had, and as the probabilities of a recurrence—judging from his previous experience—were considered slight, he discharged his physician, or what amounts to the same thing, refused to be governed by his advice. I submit the opinion that there is the best reason for believing that his previous colics had been more or less like this one, during the whole year before, and that the case up to the 31st of May, had been nothing else than an irregular and more or less marked intermittent fever. From the fact that after all this fever of the night of the 30th of May, no medicine was prescribed that we have any account of, nor any recommended, I am forced to the conclusion, that up to this date the Count's physician did not comprehend his patient's disease, or if he had an inkling of its true character he was overruled by, and very culpably submitted to the opinions and will of his illustrious patron. We are not told if his physician had even seen him in any of his previous attacks of colic, which one or two bleedings are said to have always cured. However this may have been, it is scarcely credible that he could have attended a patient so intelligent as this one, through such an attack as was experienced on the 29th and 30th, without making the discovery that he had frequently suffered similar ones. But if with all this history, and this last day's experience, the case was not understood by

him, and he was unable to make anything out of it, his responsibility is somewhat lightened, for after all it is hard to blame one for the mismanagement of a thing he does not understand. But if he did comprehend the facts in the case, and still gave his assent to what he must have known were erroneous and dangerous notions of his patient, he is in a high degree censurable. His course was plainly to have resigned his charge, as soon as his patient refused to be governed by his important instructions. As to the real character of the colic, so much spoken of, the probabilities are very strong, judging from all the circumstantial evidence we are able to collect, that it was simply *gastric* pain, not by any means an unheard of attendant on, and sometimes takes the place of the cold stage of intermittent fever. Whatever may have been the facts previously, we now see that it is no longer possible to mistake the character of the Count's disease, for on the evening of the same day, the 31st, in the morning of which he considered himself cured, a period of forty-eight hours from his last seizure by colic, we are informed that "*a new attack came on with reaction towards the brain.*"

All that we have thus far gone over, is equalled in indefiniteness, unscientific looseness, and downright stupidity, only by this statement. What do we learn by it? That he was attacked again by colic? That he was taken with chill? That he was seized with delirium? Or that he had any of the early or later symptoms of intermittent fever? To all this, the report only replies, "the abdomen was painless on pressure," and that at his *own* request the patient was bled. Whether the reaction spoken of means to say he suffered headache, or was delirious, it is impossible to say; but if the former, it was precisely what might have been expected after so many bleedings; if the latter, he certainly was in a very unfit condition to give so important directions, no matter what his medical education may have been: so that in either case, his physician was again guilty of a dangerous inefficiency, in not having been governed by his own judgment, which, thus far, we have not seen that he was, in a single instance. At this stage of the drama he was bled twice again, and then nothing more is said of him for thirty-six hours more or less, when we are told that during all that period he had not slept. Had he been delirious during a great part of this time? How many hours of it had his fever been intense? What remedial measures had been employed besides the bleeding? No reply to any of these inquiries; but the probabilities are strong

certainly, that, what with his exhausting bleedings, and his depressing miasmatic disease, he must have been, a part of the time at least, in a condition bordering upon asthenic delirium, if he was not absolutely crazy. The next therapeutical proceeding recorded is "an injunction;" but for what purpose it was given or of what composed, we know as little as if it were not mentioned at all.

It now for the first time appears that the physician suspected there might occur another paroxysm, or, as it is termed in the report, "an exacerbation," a singular name, by the way, for a paroxysm, for we are told in the context, as plainly as it would seem possible for this reporter to tell anything, that another paroxysm did come on the following evening, and that the patient was free from fever through the day.

Here for the first time, after two severe and long paroxysms, we learn that treatment was commenced. In reply to the query put in the report, "Could this treatment have been commenced too late?" I would say, that *treatment* should have been commenced much earlier; but even at the time mentioned, I do not think the case was by any means desperate, had it been attacked in an efficient manner, which was by no means the case. The doses were entirely inadequate, and given in a most routine empirical manner. I cannot better illustrate the different results obtained from quinine, administered in the doses given to Count Cavour, and those obtained from such doses as experience the world over has shown proper, than by quoting the written report upon this point, of one of the surgeons of the U. S. Army. He says, "some two years since I was so unsuccessful in arresting the paroxysms of intermittent with the sulphate of quinine, given in two-grain doses every hour, (although during the apyrexia as much as twelve, eighteen, or twenty-four grains had been given,) that I laid it by in despair, and resorted to sedatives and relaxants, such as tartrate of antimony, ipecac, opium, etc. Still, however, I was not satisfied, and the great reputation the Peruvian bark had so long enjoyed, created doubts as to the propriety of abandoning its use. Soon, therefore, I determined to give it another trial in larger doses, and with this view I commenced three or four hours before the expected paroxysms, and gave from four to six grains every hour until it produced its peculiar effects upon the brain—ringing and buzzing sounds in the ears, a sense of stricture across the forehead, and temporary deafness — effects invariably produced in every case where three or four such doses had been

given. From this time forward I was constantly successful, nor do I remember a case in which it failed, when the peculiar effects it displays on the nervous system were produced. Finding, then, that the enlarged doses had such happy effects, I was induced in many cases, when the apyrexia was short, to give it in single doses of from ten to fifteen or twenty grains, according to the violence of the disease. Here, then, I saw cases of intermittent fever that could not be arrested by fifteen or twenty grains of sulphate of quinine, given in small and divided doses, yield immediately to the same quantity given in larger doses at much shorter intervals."*

As to the comparative activity of the citrate and sulphate of quinine, I have never taken the pains to determine by experiment, but can see no reason why there should be any perceptible difference. But whether there be or not, is unimportant in this particular case, for Cavour did not take enough, had it been the *sulphate*, to produce any results. The gentleman above quoted utterly failed to break up paroxysms with it, given at the rate of two grains every hour; but the Count took of the first prescription only two and a half grains every two hours, really about half the amount. Later we are told that it was prescribed in five-grain doses, but as it was so timed that he could take only one dose before the beginning of another paroxysm, it turned out to be useless, and the whole fifteen grains were thrown away. There is another singular circumstance brought out in this record, viz: that the patient never had *chills*, till some hours after he had commenced to take the quinine. This, for all the world, looks like a case made up to suit the medication.

However, he had a chill, at last, of an hour's duration, followed by fever which lasted for twenty-four hours, more or less intense, attended with delirium. Here we have a positive declaration, that in *a state of delirium* the patient insisted on being bled, and accordingly *was* bled for the sixth time. If this is a veritable statement of what occurred in the sick-room of this patient, more convincing evidence of the imbecility of Count Cavour's physician can hardly be conceived.

Should I go on in this order of examination, little else than a repetition of the same puerile proceedings could be found throughout this most extraordinary clinic. We will not, therefore, spend more time with what was done or said to have been done, but proceed to consider what might and should

* Medical Statistics U. S. Army, 1839 to 1854, page 638.

have been done. Well may the author of this clinical report ask, "Now what was the disease?" If the Count's physician made up this report, he can hardly be charged with want of ingenuity, for a more ingnious mystification, and evasion of the main points in the case, would be difficult to match in the annals of either medicine or law, both so famous for this species of dodging. But with all the apparent effort to make a report, and say nothing, enough has forced itself into view to enable one who has seen much of miasmatic disease, to satisfy himself that the Count's disease was an *intermittent fever*. First, six years prior to this last illness, he had suffered much from, and was a long time getting rid of, an intermittent fever. This fact alone should facilitate greatly the diagnosis of any subsequent disease, having anything like a periodicity, as was doubtless the case with the colics of this patient, which we are told were particularly toublesome for the last year of his life. I have already given my reasons for believing that these colics had invariably been attended with fever. Second, about two weeks prior to his final illness, he had exposed himself for some days to great heat of sun in riding over his country estates, and—although nothing is said of it—probably to miasmatic exhalations. For a week or ten days after his return from this fresh exposure "he was observed," says the report, "not to be so well as usual, and more irritable." This moral condition is a most common premonition of miasmatic fever, as well as an accompaniment of the incubation (if this term may be employed) and development of miasmatic disease. Third, on the night of the 29th of May, he was seized with one of his *accustomed* colics, which terminated in fever followed by distinct apyrexia, as we have seen. Forty-eight hours after, another paroxysm set in, ran its course, and was followed at the same interval by a third, setting all doubts as to its character at rest, even in the minds of his tardy physicians, who it appears did not commence their trifling medication till he had suffered two severe paroxysms, and had been bled five times. Had the patient, on the morning of the 29th, when seized with colic as it is called, been ordered into hot water to the knees, and opium sufficient to relieve his gastric pain, with acetate of potash, or spirits of nitre, or small and frequent doses of ipecac, to induce and promote perspiration, the hot stage of the paroxysm would, without the least doubt in my mind, have been curtailed to less than six hours, while the various bleedings so reduced the vital forces, that his brain was desperately at work for twenty-four hours, battling with the disease, and restoring the system to a normal state.

As to the amount of blood taken, we are quite as ignorant as on any other important point in this most dubious report. But whether much or little, I do not hesitate in declaring, that every drop taken, did the patient injury. Plethoric butchers may occasionally be bled in miasmatic fever without danger, but a man of the age, the habits, and the brains of Cavour, loses blood badly in these diseases, at great expense of vitality, and much at his peril. At the commencement of the apylexia on the morning of the 31st, or even after the second paroxysm, and all of the bleedings, on the morning of the 2d of June, as soon as the skin began to feel moist, which, by the way, I believe is not mentioned in the whole report—ten grains of quinine in solution should have been administered, and repeated hourly till his ears rang, or till he showed some other evidence of being thoroughly under its influence, and then should have been kept so far at least forty-eight hours, by a dose once in five or six hours of sufficient amount.

Here I wish to remark, that my very extensive experience in the use of quinine has convinced me that the theoretical administration of it, in small and repeated doses, for the object of saturating the system, and thereby expelling, or neutralizing, or destroying the miasm, is an unreliable, generally useless, and dangerous practice, in districts where there exists much intensity of miasmatic poison. A dose of quinine so small that it produces no sensible influence or impresaion, is not to be depended upon either as a preventive or curative. The quantity requisite to produce this effect, is variable, from ten grains down to three. As a general rule for adults, four or five grains will produce it (if given in solution), but if not, it should be repeated in the course of an hour. It seems hardly requisite to say, that when a prompt action of this agent is required, it should be given in solution. Quinine is not a cumulative medicine. Its effects are about as transitory, and it is eliminated from the system with as great facility and rapidity, as a dose of alcohol. Hence, if the indications of its influence upon the brain—such as buzzing in the ears, etc., are established, and allowed to pass off, before the hour for the commencement of a new paroxysm, it will rarely do any good. I have repeatedly, in my own person, failed to arrest premonitory symptoms of miasmatic fever—such as pains of the extremities, loss of appetite, restless nights, slow digestion, etc., for two or three days in succession, by the occasional use of a moderate dose—say four or five grains—which at once disappeared, the moment my ears began to ring from a

double dose. I have never seen any reason to believe in the chemico therapeutic doctrine, that the presence of quinine in any quantity, and miasmatic poison in a state of activity, cannot at the same time exist in the system; that the quinine neutralizes the poison, in some inexplicable chemico-vital manner. It exerts its medicinial power, by simply stimulating the brain to a more or less healthy vital action, of resistance, restoration, and preservation. Hence if it be not administered in amount sufficient to produce effects appreciable by the senses, it will, as a rule, be worthless in the treatment of intermittents. From this belief, which I have not settled down in without ample evidence, comes my opinion, that if Cavour, on the morning of the 31st May, had taken ten grains of either citrate or sulphate of quinine in solution, and if his ears did not, in the course of an hour, begin to give indication of its action, repeated the dose, and so on, till he *had* unquestionable evidence of its action, by occasional doses, for two days; notwithstanding the three suicidal bleedings he had already suffered; his disease would have been cured, or at least that he would have recovered from that attack, and his country be spared her loss. At the approach of the hour for the paroxysm, which in order would have come on the 4th June, it would have been prudent to take another ten grains for safety. It is always safe practice in miasmatic disease, to particularly respect the first and second regular periods, after the one he has been carried over by antiperiodic, and to show this respect, by administering a good dose, of from five to ten grains, two hours in anticipation of its arrival.

Intermittent clearly, and simply in the beginning, Cavour's disease, by repeated bleedings, and by the exhaustion of vital force, produced by the successive uninterrupted paroxysms of a violent fever, was converted into what the reporter calls *ataxic*, attended very naturally by the delirium of exhaustion. Hence we see, that during the remainder of his existence, after the sixth bleeding, he was more or less constantly delirious. It was in almost every particular a case of what in this country is known, or supposed to be known, by the name of Panama or Chagres fever. The main point of difference is, that in his case vitality was exhausted by *bleeding* and fever, while in the latter it is reduced by the influence of tropical *heat*, and fever. The suggestions as to the treatment that should have been employed, both in the paroxysms and to prevent them, in this case, are an expression of the conclusions arrived at, from an extensive experience with this last named fever.

If these remarks and opinions, frankly given, result in throwing any light on this—as already stated—nearly worn out subject; and especially if they are ever of any service to the young physicians, who are annually going forth from this country to all parts of the world; my wishes are attained. I desire to impress them with the fact, that next to ignorance, comes inefficiency in administration, and that if they get patients whom they cannot control, it is much better for their professional reputation, and peace of mind, to resign the care of them, than to be dragged by them into discredit, and perhaps infamy, for an act which may be the fruit of ignorance or indiscretion, on the part of the patient, if assented to by the physician, who understands the dangers attending it may render him highly censurable, criminal, or even infamous.

Count Cavour is past recovery; let this example serve as a lesson for future reference, to all whom it may interest.

New York, Nov. 18th, 1861, 42 W. 29th St. — *Am. Med. Times.*

CROUPY INFAMMATION IN THE MARGIN OF THE GUMS, AND ITS EFFECTS.

By DR. STEINBERGER, of Vienna.

Translated by George Henry, M. C. D. E.

Croupy inflammation of the gums is simply referred to by most authors, in their description of diseases of the mucous membrane of the mouth and throat, as 'diphtheritis membranacea;' and it is apparently regarded by the practical surgeon as of less importance than when it attacks the throat, because he does not see in it so much danger to the life of the individual: and yet it merits special consideration, as well for its primary appearance in the margin of the gums, as for its morbid consequences, which may involve neighboring osseous structures, as the aveolar processes, or the jaw-bone itself. This disease is of special importance to the practical surgeon, who attends particularly to diseases of children, because it often assumes an epidemic form after scarlet fever and other eruptive diseases in hospitals for children, and even in large families: it is of equal moment to the dentist, who is mostly called upon to treat it in the later stages, when it has

produced loosening of the teeth, degeneration of the alveoli, or necrosis of the jaw-bone. When the disease occurs in adults, the dentist often meets with it in its earlier stage, the patient being induced to consult him, partly owing to the pain, partly to the fetid odor arising from the affection, which is a burden to his existence.

The disease presents itself under the following appearances: The gum is inflamed, somewhat swollen, and very painful, and prone to bleed on being touched. In its early stage, the margin of the gum is found to be covered with a pale-gray, structureless membranous exudation, scarcely half a line in thickness, which sloughs off in flakes. The mucous membrane beneath is deprived of its epithelium, very vascular, and bleeds readily. The formation of the exudation commences generally externally, *i. e.* on the labial and buccal portions of the gum of the lower jaw, and often first at its boundary with the lower incisors, whence it gradually progresses until the margin of the gums is completely involved, The gums of the lower and upper jaws are seldom attacked at the same time.

The exudation takes place rapidly, often in a few hours, not seldom in the course of a night; it is accompanied with a very painful sensation, described by the patient as a drawing pain: this is increased by stopping in warm places or in bed. Feverish appearances are slight, often scarcely perceptible.

As soon as the exudation is formed, it sloughs away in an ill-smelling, ichorous mass, which corrodes the mucous membrane beneath, producing an ulcerated surface. Not unfrequently, the mucous membrane of the cheeks lying on the teeth and diseased gums is covered to a great extent with this exudation, as also the border and under surface of the tongue. An inflammatory action is likewise set up in the lining membrane of the alevoli, through the ichorous discharge; it becomes strongly injected, swollen, and covered with exudation, which, after sloughing in the alvoli, particularly in those of the lower jaw, is retained, as it were, in a reservoir. The teeth become loose through the swelling of the periosteum, appearing longer to the patient; and through the continued presence of the corroding ichor, the periosteum is destroyed, and the teeth, being disconnected with the jaw, either fall out of themselves or are readily removed.

"When the periosteum is destroyed, this exerts its corrosive power on the bones, which become infiltrated with the fluid, carious in larger or smaller portions, and finally necrosed. In

the almost epidemic cases of croupy gums occurring in the Hospital for Children last year, the opportunity presented itself for observing several cases, in which the aveolar processes had so disappeared that in children of from four to six years of age, after the primary teeth had fallen out, the germs of the developing permanent teeth were exposed to view.

In the upper jaw, the destroying process does not proceed to such a depth as in the lower jaw, because the ichorous matter, being heavy, has a tendency to sink downward, and thus considerably facilitates the cleansing of the parts; while, in the lower jaw, the decomposing fluid is retained in the alveoli and in the porous bones, thereby greatly favoring the extension of the disease. Frequently, necrosed portions of the alveolar process, an inch in length, are exfoliated. Necrosis does not always proceed from the alveolar border downward; but the gums may be destroyed and the anterior bony wall die away, leaving the dental germs exposed.

This disease occurs more freqeently in children than in adults, and more often in those who have lately recovered from tedious illness—as scarlet fever, measles, and typhus—than in those who are otherwise quite healthy.

A chilly, damp dwelling is commonly an exciting cause, or exposure to a cold, damp draught: the latter is often the sole cause of such disease in healthy and often strong men, as travelers, or those engaged in business in wet localities. The disease only assumes an epidemic character in hospitals for children. This appears to arise partly from immediate contagion, through the transmission of the exudation from one child to another by means of various articles in use, and partly also from the weakness which follows long-continued illness. Sometimes a peculiar tendency does not appear to lie in any definite external circumstances; for it is a fact that, in the sick-chambers set apart for these patients, their number will not diminish for several weeks together, but recruits are constantly added from other wards, while the earlier patients have long since been dismissed as cured.

The duration of this disease is dependent on its extent, especially on the stage in which treatment is first resorted to, and, further, on the general state of the patient's health Its effects are generally more lasting and destructive when it succeeds a previous illness than when occurring in healthy individuals. Slight cases are curable in from eight to fourteen days, the more severe requiring often several months.

Treatment.—As croupy inflammation of the gums exerts its

hurtful effects particularly through the lengthened presence of the ichorous product discharged from its generating source on the surrounding parts, the first thing suggesting itself as favorable to a cure is extremely careful cleansing. The best plan is carefully to remove the exudation before it is thrown off. This is readily effected, and that without giving much pain, by removing the exudation, especially from between the teeth, with a dossil of lint held with an instrument. This done, the ulcerated surface is cleansed from blood by syringing with warm water: a little alum may be added when the hæmorrhage is excessive. When the mucous membrane is thus cleansed, the wounded surface should be touched with caustic, not forgetting to apply it well between the teeth. In the interim, the patient should frequently take warm mucilaginous decoctions in the mouth, which should be a cleansing and soothing kind; and the cauterizing must be repeated so long as any new exudation is formed.

As this disease calls for direct treatment, which is very often refused, especially by children, because it is accompanied with pain, and the nurse, and often even the doctor, avoids the patient, on accounl of the dreadful fetor, very neglected cases of this kind are constantly received for treatment. An ill-smelling fluid, a mixture of saliva and ichor, flows from the mouth; the lips and inferior maxillary glands are swollen; the otherwise indolent patient announces his approach to the doctor in tears and fear of coming pain. In such cases, the mouth should be well syringed with a slightly-aromatized warm fluid, in order to remove all loose matter. The patient, who feels an immediate benefit from this cleansing, soon endeavors to open his mouth, when all loose flakes of exudation can be removed, and the state of the teeth ascertained. If the teeth are found to be very loose, and ichorous matter flowing from the alveoli, the teeth must be removed, especially if they are carious, or, as is often the case in children, the roots are exposed. If any necrosed portions of bone are discovered, they should be removed at once. After checking the hæmorrhage, the ulcerated portions should be cauterized.

Besides this local treatment, the 'general' is confined to change of air, and, in the convalescent, a liberal diet. By careful attention to this method of treatment, no trouble being spared, the disease can be cured, and its effects limited; though a great extension of the disease in weak persons, particularly in neglected children, may terminate in death through absolute exhaustion."—*London Review—Dental Cosmos.*

EDITORIAL.

PARTICULAR NOTICE.—Until otherwise notified, correspondents are requested to address all communications on business matters of the JOURNAL to

DR. E. INGALS,
BOX 14, CHICAGO, ILL.

Dr. Ingals has kindly consented to act as business manager of the JOURNAL, an arrangement which cannot fail to meet the approbation of all interested, as conducive to the material prosperity of this periodical, and also enabling the editors to devote their attention solely to the duty of appropriately supplying its pages.

Communications for publication may be addressed as heretofore to either of the editors.

☞ Please forward without further delay your arrearages and subscription for 1862, to

DR. E. INGALS, Box 14, Chicago, Ill.

Which was it?—It is variously rumored that a certain personage of high military rank has been invalided for a month or more past, either from typhoid fever, simple catarrhal fever titillated by "attenuations," or a "big scare." *Who is it?*—That is seeking to foist homœopathists upon the medical staff of the army?—That has just secured the position of Brigade Surgeon to a homœopathic confectioner from this city? Will the honorable gentlemen composing the Examining Board at Washington assume the responsibility of this gross insult to the profession, or is it chargeable upon the little gentleman who has thus far been conducting the war upon homœopathic principles—the less done the greater the effect? Or is it a part of the programme by which the valorous * * * hopes to achieve a renomination after having at least once before

challenged the forbearance of his constituents? Meanwhile what will the profession do? Are they disposed to submit quietly to being reduced to a level with homœopathists and quacks of every hue? What say the military surgeons, the medical societies and the journals? Have honorable medical men no rights the powers that be are bound to respect? It is somewhat trying to the nerves, with such cases as this in view, to read the spirited rejoinder of our esteemed contemporary, the *Boston Medical and Surgical Journal*, to the *British American Medical Journal*, which groaned in spirit because it had been reported that the notorious "Dr." Tumblety had received the appointment of Staff Surgeon to Gen. McClellan. Our Boston *confrère* could not think this possible, for "they are all honorable men"(!). Whether Mr. Tumblety is Staff Surgeon to Gen. McClellan (son of the late Prof. Geo. B. McClellan of Philadelphia—*quantum mutatus ab illo!*) or not, we do not know, but he may well be, for Chicago can boast a Brigade Surgeon, late a Prof. in a quasi infinitesimal college, confectioner extraordinary to *Small*, and a fitting congener to Tumblety *et id omne genus.*

Early Vaccination.—Barthez in a memoir read before the Societe Medicale des Hopitaux de Paris concludes that vaccination can scarcely be performed too soon. Yet there is little practical inconvenience in delaying it to the third month as an invasion of small pox before the sixth month is exceedingly rare. He prefers the third month. The *Am. Med. Times* suggests that in the vaccinations rendered necessary by hospital exposures during the first few days after birth, accidents more or less serious and even fatal have sometimes occurred. The three months rule is practically the best.

Cæsarean Operation.—Professor Gogefroy describes a successful case of Cæsarean operation lately performed by him. He operated four times, and this is his first successful case. He attributes the recovery to the early period of the operation. The advantages of operating early—if possible, before

the rupture of the membranes—are great. The incision into the uterus is, in such a case, much diminished by the contraction of the uterus; in this case, for example, it contracted from about ten to five *centimeters*. Besides injury to the womb and bladder, the consequence of prolonged labor is thereby prevented. The practice, the professor adds, of three nations illustrates this point. The Germans, who operate early, save many females; the French, who delay, save fewer patients; and the English, who only operate *in extremis*, lose almost all their patients.—*British Med. Journal.*

Gun-shot Wounds produced during the loading of Artillery.—Dr. Cortese relates (*Omodei Annali Univ. di Med.*) five cases, and gives the following summary of his observation. No other blow of a projectile imparts so great an amount of commotion to the entire limb, and the surgeon is therefore compelled to direct his attention to the whole extremity, whatever amount of lesion may be manifest in the hand. A neglect in this regard may lead to gangrene gaining possession of a large portion of the limb, or to a generalized suppuration, while a diminished power of reaction in the injured parts may give rise to purulent infection, or render amputation useless. When the hand is severely torn, its disarticulation and even the amputation of the forearm is insufficient to secure recovery, because the tissues are more or less destroyed in their intimate structure in consequence of concussion. In such cases, the arm should be amputated. The sooner amputation is performed, the greater is the probability of a favorable result. The rapid and very extensive tumefaction of the limb constitutes a sufficiently certain criterion of the severity of the derangements which are propagated along its whole extent. When no fractures are detected in the diaphysis of the bone, some lesion in the ulnar articulation must be suspected. When the lesion does not seem severe enough to call at once for amputation, we must be prepared for secondary occurrences which will unfit the limb for its functions. Still, conservative treatment should in such cases be attempted.—*British and Foreign Medico-Chirurgical Review.*

Plaster of Paris Dressings for Fractures.—The Parisian surgeons make frequent use of plaster of Paris dressing for fractures, the method consisting essentially of soaking

layers of coarse cloths in the fluid plaster, applying them lengthwise upon the limb and then encircling all with a common roller bandage, which may or may not be also soaked in the plaster. The whole "sets" quickly, applies itself accurately to the surface and supports equally all the parts. It can readily be so applied that one or more of the splints can be removed at pleasure for the application of lotions, &c. It is unirritating and requires little trouble in adaptation. It is better not to conuect the whole dressing in a mass until the primary swelling has been measurably reduced. The cloth used should be coarse and loose, so as to absorb freely the fluid plaster, which latter should be little thicker than milk or cream.

It is observable that the most of the improvements in surgical practice of the present time consist in simplifications and the discarding of the cumbrous paraphernalia so long in use. And the practice of medicine is likewise freeing itself from divers unnecessary appendages.

Proposed Changes in the Med. Dept. of the Army.—The bill introduced into the Senate initiates the following arrangement of the medical staff:

Director-General, with rank of Brigadier-General, who shall be chief of the medical corps, aud perform the present Surgeon-General's duties.

Sanitary Inspector-General, with rank of Colonel of Cavaly, who, under the Director-General, shall have general supervision of all that pertains to the sanitary condition of the army.

Six Sanitary Inspectors, with the rank of Lieutenant-Colonel of cavalry, who shall inspect the sanitary condition of the troops, and report to the Sanitary Inspector-General.

Surgeons of first class, with rank of major of cavalry, for staff, hospital and bureau duties.

Fifty surgeons, second class, with rank of captain of cavalry to be assigned to duty with regiments.

Assistant surgeons, not exceeding seventy, with rank of first lieutenant of cavalry, with duties of assistant surgeons.

Not exceeding seventy-five medical cadets, not less than eighteen nor more than twenty-three years old at their entry,

to be examined by a medical board. After three years' continuous service they may be examined for promotion to the rank of the highest class of non-commissioned officers.

As many Hospital Stewards as the service requires, designated by a Sanitary Inspector, on the recommendation of the Senior Surgeon of the post, division, or regiment, with rank of First Sergeants of Cavalry.

Sections 2, 3, 4, 5 and 6, provide for selection by the President, from the whole Army Medical Corps, of suitable persons to fill the places of Director-General, Sanitary Inspector-General, and Sanitary Inspectors, none of whom are to be over sixty years of age. Other officers are to be appointed and promoted by seniority. Vacancies are to be filled from civil life or from Brigade Surgeons of volunteers, after due examination, who are not to be over thirty-five years of age.

Section 5 repeals the allowance of extra rations to Surgeons, upon the completion of ten years' service.

Section 7 provides for the retirement of every medical officer sixty-five years old.

Section 8 repeals all inconsistent laws.

If any one thing is more clear than another it is that some change is requisite in the conduct of medical affairs in the army. Nevertheless it is a dangerous matter to meddle with. If it be tossed into the Congressional bear gardens, who knows but that Mr. Senator Grimes will foist in a homœopathic clause, as he has already threatened a bill to introduce homœopathy into the hospitals at Washington. Many a member, whose seat in House or Senate is "shaky," will seek the smiles and support of some local demagogue at home by prostituting his trust to the support of the demagogue's pet humbug—trusting meanwhile to escape deserved castigation from an insulted profession. *Mark these men*—for the time will come when a good memory may be used to advantage by honest men as well as knaves.

Good Pay for once.—Dr. Toland, of San Francisco, it is said, enjoys an income of $35,000 *per annum* from the practice of medicine and surgery.

Chateaux en Espagne.—The Cincinnati *Lancet* publishes a fee bill in nominal force in that city, which is largely above the rates in this city, remarking however that "these rates are all understood to be simply a maximum rate of fitting remuneration." This leaves the whole matter really at sea, for it is the under-bidding of anxious seekers after practice which demoralizes. Good faith requires that there should be a *minimum* as well as a maximum. As a maximum the Cincinnati rates are much too low, as a minimum it is clear that they cannot be sustained. With our confere, we adopt the language of the Boston *Journal:* "We trust our distant readers will not be deluded into supposing that the average collections of physicians here come anywhere near the aggregate which this table makes their charges assume on their books. Far from it. The grand total recorded may make a very pretty picture, but, alas, it is, in the main, a 'dissolving view,' the 'stuff that dreams are made of," 'the basis for air castles,' *Chateaux en Espagne.*"

Syphilis conveyed by Vaccine Lymph.—The London *Lancet* records from an Italian journal the transmission of Syphilis to forty-six children by vaccination with contaminated lymph derived from a single source. The evidences of syphilitic infection appear entirely conclusive.

The Excision of Joints.—By Richard M. Hodges, M. D. Boston, 1861; pp. 204.—This is one of the Boylston Prize Essays, and appears to be a valuable *resume* of the subject. It will be further noticed in an ensuing number.

Dropsical Accumulation.—Prof. Peaslee has recently removed one hundred and forty-nine pounds and three ounces of dropsical fluid at a single operation. The patient, a young lady, previously had an abdominal circumference of six feet and two inches. Dr. Peaslee in April last removed from the same patient one hundred and thirty-five pounds of fluid.

Medical Journals.—So far as we can ascertain there are now but *twelve* medical journals surviving in the United States, and two of them are published on the Pacific coast.

Index of Vol. 4, 1861.—We suspect that a glance at the list of subjects noticed and discussed in the last volume, the index for which is sent out with this number, will demonstrate that the Medical world still moves, and that active brains are still at work in developing the real power and respectability of the medical profession. It is sincerely believed that, in the year past, the CHICAGO MEDICAL JOURNAL has been both a reflex and index of the progress of the art and science of medicine. No effort will be spared to render the ensuing volume an exponent such as its friends desire and the profession demand. Arrangements are being made by which it is expected that the faults of the mail, which, during the year past, have annoyed both editors and subscribers, will be corrected, and prompt transmission secured.

Mortuary Statistics of Chicago for 1861.—The subjoined table we reproduce from the *Chicago Daily Times :*

Months.	Adults.	Male.	Female.	Child'n.	Male.	Female.	Child'n of Nat. Pa's.	Child'n of For. Pa's.	Total
January	90	35	55	83	40	43	23	60	173
February	60	36	25	75	36	39	25	50	135
March	85	32	53	87	40	47	28	59	135
April	50	38	12	74	28	48	26	50	126
May	58	28	30	76	50	26	30	46	134
June	49	30	19	82	39	43	35	47	131
July	120	65	55	119	85	34	50	69	239
August	90	48	47	172	100	72	38	134	262
September	75	40	35	152	85	67	40	112	227
October	55	28	27	65	34	31	22	33	120
November	72	50	22	83	45	38	27	56	155
December	92	61	31	103	68	35	41	62	195
Totals	896	485	411	1173	650	523	385	778	2069

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"Dr. Bedford has explored the whole of his ground, in a thorough, luminous, and systematic manner. Without instituting any critical comparison of this with other able works on obstetric science, we simply express the opinion that it is inferior to no other in excellence, while as a Text-Book we are inclined to think that it has a general superiority over all others. We know of no other work that abounds with greater evidences of research, or which is more exact, or more philosophical in the department to which it is limited. We commend it for its unsurpassed ability in all that appertains to scientific and and practical obstetrics. It is a national work, and should, therefore, in having no superior competitor, become the Text-Book in the Medical Colleges of the United States."—*Boston Medical and Surgical Journal.*

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SELECTED.

FOOD—SLEEP—PROFUSE PERSPIRATION.

From Dr. Ware's Lectures on General Therapeutics

It will be seen, from the statements already made, that one of the most potent agencies in promoting recovery from chronic affections is a perfect performance of the function of nutrition; and that, with a view to this, a due regulation of the diet is required. The general principles by which we are to be guided in this regulation have been stated, but there still remain a few other considerations that are to be kept in view.

Every case in regard to its management in this respect is to be studied by itself, and we are not to be governed by any arbitrary rules founded upon the supposed requirements of particular diseases. As has been formerly stated, precisely the same disease as to its pathological character, may require the most opposite arrangements as to diet in different persons, as well as in many other particulars. In pulmonary consumption, for example, one patient will thrive best upon a milk and vegetable diet—another upon a diet of animal food and stimulants. Why, we know not; we are to be governed by the fact that it is so, and not by any preconceived opinion that such or such kinds of food are suited to what we conceive to be the nature of the disease. The same is true of all other affections. It is true that in beginning the treatment we must be guided by certain general notions as to the nature of the case and its relations to particular kinds of food; but in this

way we can only approximate to a true judgment of what the constitution of the patient requires. It is only by considering each case as an experiment, to be judged of on its own merits, that we can arrive at a satisfactory conclusion in what way it is to be managed.

Quantity has an important relation to the perfection, not only of the primary digestion of food, but also to the ultimate adaptation of the results of digestion to a perfect nutrition. The kind of food may be suitable, but a small excess in quantity may seriously interfere with its conversion into a proper material for nutrition. This small excess is often felt in various ways during its presence in the digestive organs: by the state of the mouth, the breathing, the head, the *malaise*, and a general aggravation of symptoms; but even when not felt here or in addition to this, it may afterwards prejudice the progress of disease. The organs of assimilation can only perfectly prepare a certain quantity; any quantity beyond this is liable to introduce into the circulation, and present to the diseased parts, a crude and imperfectly elaborated material, which, although it may be borne with impunity by organs in a state of health, is liable to impair the sanatory process in those that are in a state of disease. In a state of health there is a power of selection which enables parts to correct in some measure the errors of the assimilation, to eliminate such portions of the material as are not suited to their purposes, and to cast them off by the excretions. In a state of disease, we have reason to believe, this power is impaired, or at least cannot be exercised without interfering with the attempt which is making to return to the normal condition. As a general rule, it is safer that the quantity should be somewhat less than can be satisfactorily assimilated, rather than greater. This is a frequent source of evil. Apparent weakness is so common a condition of those laboring under chronic disease, and is so obvious both to the patient and those about him, that there naturally arises an idea that this weakness is the principal evil to be contended with, and that its relief depends upon the amount of food that can be taken without positive and direct injury. In point of fact, the removal of weakness does not depend upon the quantity alone of nutritient introduced into the blood, but also upon its quality; and upon the exactness with which it is capable of being applied to the necessities of the organs.

The form in which food is presented and the mode of its preparation, are also important items in the management of diet. This includes the question of a liquid or a solid diet,

and also the degree of its dilution. Some patients digest liquids better than solids; and, of the liquids, those that are not highly concentrated. This can only be determined by observation, because differences in these respects are very common among those whose condition appears the same. Under the head of preparation are included all the particulars of the cooking, the mixture and the seasoning of food. So wide a subject can only be superficially glanced at. For the most part we are to prefer simple food, with no great variety at each single meal, but with considerable variety at successive ones, so far as this is compatible with the character of the case. Food which when alone is very successfully managed by the digestive organs, may cease to be so when combined with others. Of this we have the strongest example in mixtures where by the process of cookery they become pervaded by some form of oil; and this is more especially the case where its chemical character is changed by heat; but the same takes place, in a less degree, with regard to sugar. Such combinations are withstood by many constitutions, sometimes permanently—by many only temporarily; but I am persuaded that the processes of cookery, of which these are samples only, are closely connected with that imperfect assimilation, and consequently that vicious nutrition, which not only hinder recovery from chronic diseases, but also have much to do with their origination. Mankind in general, and even physicians, are not sufficiently ready to look far back into the whole habits of life to account for disease. They attribute it to recent occurrences. But in the case of chronic affections at least, it is quite certain that, although their obvious onset may be sudden and determined by recent events, yet their existence is due to causes previously operating gradually and insensibly. Imperfect assimilation and faulty nutrition are probably the principal of these, and of other causes which contribute, such as cold, heat, bad air, the state of the mind, etc., it is probable that their efficiency is much due to their interference, either directly or indirectly, with the perfection of this fundamental function of life, either generally or locally. So also the distinct improvement in chronic disease from food, air and climate, from suitable exercise, from an improved condition of mind, and various other circumstances, is due to their influence on the digestion, the assimilation and the appropriation of the aliment.

The selection of a suitable diet is not, then, the only point of view in which this subject requires to be considered. The

circumstances which are capable of influencing the whole digestive, assimilating and nutritive processes, are of equal importance. The common experience of life shows what a variety of causes are constantly modifying these fundamental operations. Affections of the mind change the appetite and digestion, and both the secretions and excretions, all of which are component parts of them. Sudden passion will deprave the character of the nurse's milk so as to produce sickness and vomiting in the child, as well as improper food. Grief will produce a bad taste in the mouth, a foul breath, a disturbed urine. Want of sleep will do the same, and will reduce the weight and the strength. Improper ventilation, foul air, poisonous exhalations, operate in an analogous way, also cold, heat, fatigue, &c., &c. Whatever, in fact, may be the primary effects of these various causes, their ultimate influence, so far as they are causes of disease, or preventives of recovery, depends upon their interference with the perfect performance of the great function of nutrition. In speaking, therefore, as we proceed, of the management of the patient as to many of its details, we are to understand that it is by their influence in this particular direction that their importance is chiefly to be measured.

In all forms and conditions of disease, both acute and chronic, the state of the patient as to sleep is an important consideration, both as regards his comfort, and also as regards the satisfactory progress of his case. The nature of this condition of animal life we do not fully understand; we only know that it is a necessary one and having a vast influence on the state of the system. Its purpose seems to be to afford an opportunity, by the suspension of certain activities of the system which require the exhaustion of those powers that emanate from the nervous system, for the reinforcement of those powers. It is also during sleep that the repair of the tissues by nutrition is provided for. Not that all nutrition is suspended during our waking hours, or that all waste is suspended during sleep, but that in the two states of sleeping and waking there is respectively a large predominance of the repair and the waste. Sleep is not merely rest, as it has been sometimes considered, an entire rest of all the organs at once. It is something specifically different. It is a condition of an entirely different nature, and a condition for which rest is not in any sense a substitute. The mere fact of existence, without exercise, without fatigue, the simple going on of life, implies a certain expenditure of force, which renders neces-

sary at certain intervals a suspension of those functions of the brain and nervous system which are subservient to the phenomena of mind. It is possible that ordinary rest might afford an opportunity for the nutrition of all these tissues, except those which are the agents of the mind. But it seems to be necessary for the repair of these, that the functions of the mind should be also suspended. Of the physical condition of the brain in sleep, and also concerning the peculiar state of the mind in sleep, notwithstanding the many theories which have been formed concerning them, we know nothing with certainty, and this is not necessary to the practical management of the sick. What should guide us is the knowledge that a certain amount of sleep at proper intervals is an absolute necessity, and that its absence or its deficiency is always a great evil, and to be prevented by every passible means.

In acute diseases a sufficient amount of sleep is at once a favorable indication of the nature and issue of a case, and also is an important agent in the promotion of a favorable issue. Its absence, on the contrary, is, *pro tanto*, an unfavorable indication as to the issue, and also promotes an unfavorable issue. Want of sleep adds to the sufferings of the patient, and also to his exhaustion, and consequently interferes with the success of the sanitory process and impairs the power of recovery. In every point of view, then, the state of the patient in this respect becomes the object of special attention.

Salutary changes in the condition of a patient will be often found to take place during sleep, and to manifest themselves most obviously on awakening from that which has been sound and refreshing. But the sleep here is not so much the cause of the change as its consequence, and yet if any circumstance prevent the sleep, the favorable symptoms are less likely to occur. The general purpose in acute disease is, throughout, to discover those circumstances which may prevent sleep, and endeavor to counteract them. Thus, the absence of sleep may be caused by an irritable and loaded state of the bowels, and then anema may give relief; by the heat and irritation of the skin from a paroxysm of fever, and then cold sponging, the warm bath, a warm foot-bath with infusion of hops or poppies, may answer the purpose; or coldness of the feet may be the cause, and then warmth of any kind may be employed. Sleep should be procured without direct medication, where practicable, but this is not always practicable; and, when not,

various articles can be given, which are sometimes successful. Such are all the ethereal medicines—tincture of hops and belladonna, and some others. But these very frequently fail, or succeed but for two or three nights. Where the evil is a very marked one, the experiment should be tried of procuring sleep by opiates. These, it is true, often fail, and often give occasion to a variety of uncomfortable feelings. How far these should influence us to abstain from their use, is one of the most delicate questions in practical medicine. As I shall have occasion to speak more particularly of the qualities of opium hereafter, in connection with some of its other uses, I shall only remark here that the procuring of sleep by it, is so important an object in many cases, that this beneficial effect is not to be sacrificed, where the necessity is urgent, without a fair trial of several preparations, and in more than one way. Where a full dose by the mouth either fails of effect, or produces unpleasant secondary effects, its administration by the rectum may succeed; and where full doses in both these ways fail, a repetition at short intervals through the day, of very small doses, such as five or six drops of laudanum, or its equivalent of some other preparation, will succeed. It must be confessed, however, that there are some patients so unfavorably affected by this drug, that in no way can it be endured.

In chronic diseases of all kinds, the same attention to procuring sufficient sleep is an important item in the treatment. In many cases where patients are afflicted with insomnolence as a prominent symptom, it will be found to depend upon some circumstance which is capable of removal. Thus, in some persons, taking any solid food after the middle of the day, or in others the entire omission of food, will prevent sleep. The remedy in such cases is sufficiently obvious. Where the sensation of hunger is the cause, the purpose is better answered by a meal of some very light digestible food, such as a cup of milk porridge, or of warm milk, than by anything more substantial and slow of digestion. Still to this, as to every rule of dietetics, there are many exceptions, but these are more likely to occur in persons who are not laboring under distinct disease, but are wakeful in their ordinary state of health.

The suggestions made with regard to acute diseases are, in a general may, applicable also to chronic. Opium in these is less likely to produce immediate ill effects, and it is also easier to counteract them; but, on the other hand, since in acute diseases the absence of sleep is a temporary evil, and one

which subsides at convalescence, its use is less likely to degenerate into a habit. In chronic cases, therefore, so far as its ultimate effects are regarded, this consideration is of no small importance. In acute cases there is seldom any danger that the patient will be led to the continued use of opium after he gets well, and we may therefore avail ourselves of its beneficial effects without regard to the future; but in chronic ones this is far from being the case, and it will sometimes happen, where patients have had comfortable sleep procured for some time by this drug, that it is very difficult to wean them from its use, when their disease has subsided. In persons of feeble resolution and of nervous temperament, it may be as hard to cure them of the habit of depending upon opium, as of the use of tobacco or of alcoholic stimulants.

When, therefore, there is a prospect that opium will be likely to be required for a long time, every expedient should be first employed in order to answer the purpose, and a considerable amount of wakefulness be endured, rather than resort to it. Besides the articles above mentioned as applicable in acute cases, there are others more peculiarly adapted to chronic, such as hearing reading aloud, the recurrence of monotonous sounds, repeating from memory, going through arithmetical or other calculations, with the eyes shut. The state of skin may require alteration by warm bath; of the feet, when cold, by warm applications; of the head, when hot, by cold sponging. The mind may need tranquillizing. A disturbed state of the nerves may be present, which sundry articles have the reputation of soothing, and perhaps with reason, such as valerian, assafœtida, musk, castor and camphor. There are some milder popular remedies, such as warm infusions of sage, balm or catnip, a cup of wine whey, or of spirituous liquor and water. Something of the efficacy of these may properly be attributed to their effect upon the patient's mind. His expectation of effect from the remedy he has taken, and the direction of his attention to it, undoubtedly tends to render that effect more likely to occur. At any rate, sleep is sometimes thus procured, and occasionally by a succession of such expedients the object is secured for a long time, but more frequently they at length fail of any effect.

It sometimes happens that after a short nap on first going to bed, a person wakens without any known cause, and then remains obstinately watchful for many hours. In this case, if he rises, washes his face, hands and feet, walks about briskly for awhile and returns to bed, the charm may be broken and

a continued sleep will ensue. Or he may rise and write or read with the same result. Too much or very little bed clothing in very susceptible persons, may prove a cause of wakefulness, even when the patient is not aware that he is too hot or too cold. The choice of measures must depend upon the condition of the patient, since it is obvious that many of those mentioned are not universally applicable. There is one injunction frequently insisted upon, viz: that drowsiness in the day should be resisted, lest it should prevent sleep at night. This is sometimes true, but not always. In a majority of wakeful persons, it has been rather found, that a nap in the afternoon does not prevent sound sleep at night, but rather promotes it. And this seems to be accounted for by the consideration, that the slumber in the day soothes and quiets the system, and removes that irritation of the nerves which is so likely to occur from various causes in the course of the day, and thus predispose to watchfulness in the night.

But in spite of every expedient, it must be confessed that this symptom is, in many chronic cases, an exceedingly difficult one to manage, and that many persons are at length obliged to rely upon some form of opium.

I have alluded above to the state of the skin in connection with the sleep. We may further speak of the state of this organ—a very important, as well as extensive one—as exercising no inconsiderable influence not only upon the comfort, but also the internal condition of the patient. A hot and dry state of the skin on the one hand, or a cold, contracted and shrunken one on the other, are always attended with discomfort, and should be remedied as far as practicable. It is to be acted upon as a general rule, to bring the skin as nearly as possible into its natural condition. Hence, a dry and hot skin should be kept moist and cool; a cold and very damp one, warm and dry; a contracted and shrunken one, active; by suitable applications. True it is only effects of disease which are thus removed, but the removal of effects may aid in the removal of causes—as correcting the very hot, dry skin, which attends pain in the head or fever, often diminishes both. An imitation of the natural soft state of the skin, where it is very hot and uncomfortable, by sponging with a mixture of glycerine and water, removes the irritation it occasions, and thus secondarily may reduce the pulse and respiration. I do not speak of these as direct remedies of disease, but as alleviants of symptoms, and thus aiding the progress of recovery according to its natural law.

We sometimes find the skin in a state which contributes not only to great discomfort, but seriously impedes recovery. It is soft, flabby, moist and pale. It has a sodden look and feel. The hands and fingers are corrugated as if they had been soaked in warm water. This is sometimes an effect of disease, but not unfrequently merely of mismanagement. In disease it occurs under various circumstances, as in hectic fever, acute rheumatism, inflammations within the abdomen—both mucous and serous—in many of the lesser puerperal affections, and in mammary abscess. Where not an essential product of disease, we find it has been produced by too warm and too close a room, and too much clothing to the person and the bed. Thus there are those, both among patients and nurses, whose chief apprehension in sickness is a nervous dread of cold. We find the sick person in bed, cased in all or more than all, the flannel and other appendages which are worn in health. If a woman, as is apt to be the case, she retains the woollen waistcoat, drawers and linen with which she got into bed when first seized; to this she has added a pair of woollen stockings and a thick petticoat. Thus equipped, the skin has become tender and sensitive. The least movement of the bed-clothes, or the slightest draught of air, produces a feeling of chilliness, and blanket and comforter, one after another, are heaped upon her; a muffler is pinned around her head, a shawl drawn around her shoulders, a jug of hot water is placed at her feet, the windows are hermetically sealed, and she is fed with hot teas. She still has frequent chills, and you find her hot, nervous and restless. Yet the essential symptoms may present nothing alarming. The pulse, though excited, may be very good, the tongue tolerably clean, the appetite not deficient, and no want of sleep except what may be fairly attributed to her surroundings, and these would rob the healthy of it. Here we have to regard the real tenderness of the skin, which has been thus created, and the nervous apprehension of the sufferer; but by removing all incumbrances from the person except a single loose cotten or flannel gown, by reducing gradually the burden of bed-clothes, by admitting cool fresh air into the room—avoiding its direct flow upon the person—by administering cooling drinks, and drying the skin thoroughly by sufficient frictions, the patient speedily passes from a state of comparative torment of body and mind, to one of ease and tranquillity.

Where this condition has not been artificially induced in a

mild case, but accompanies a grave disease, the same general measures are adapted to mitigate it and give comfort, even although it necessarily continues. The cause and character of a permanently too copious sweating, is different in different cases. The sweat is sometimes sour, sometimes fœtid, sometimes highly saline, of a urinous odor or ammoniacal, or quite sticky and slimy. Various expedients for relief will suggest themselves, according to different circumstances, such as warm dry friction with a cotton or woollen towel, rubbing the skin with absorbent powders, such as powdered chalk, Indian meal or bran applied with a woollen mitten—washing with soap and water, with an alkaline solution, with a weak acid, with alcohol more or less diluted, and applied either warm or cold, according to the heat or any other possible indication, as the preference of the patient and its effects. Whenever articles are used which leave any residuum upon the skin, this is from time to time to be carefully sponged off. Merely bathing the whole body with olive oil, as in the sweats of phthisis, will be occasionally found to give some relief. Many articles internally administered have the reputation of diminishing these perspirations which are so debilitating to persons afflicted with exhausting chronic diseases, especially phthisis, scrofulous affections of the joints and chronic suppurations of all kinds. Among these, diluted sulphuric acid is most commonly employed, and most effectual; but, besides this, acetate of lead, oxide of zinc, gallic acid, and other vegetable acids, are found more or less efficacious. Usually, however, the corrective influence is transient, and continues but a few days before the symptom returns. Sometimes the simple expedient of cloth ing the patient in a loose, light flannel nightgown is more successful and durable than anything else.—*Boston Medical Journal.*

HOMŒOPATHY IN MILITARY HOSPITALS.

The U. S. Senate is engaged in the momentous times in the consideration of a subject, in itself, perhaps, the most frivolous which ever enlisted the thoughts of a rational creature, but which may prove the most important act of the session. Senator Grimes, of Iowa, has introduced a bill placing some of the military hospitals, at Washington, under the charge of homœopathists. We do not know why this class of medical practitioners are honored with such distinction, and we think other systems have a just cause of complaint in being overlooked by a Government which they equally support, and which all are anxious to serve. If Government is about to institute experiments in its military hospitals, with a view to test medical theories, it does not appear why it should pass by Botanics, Hydropaths, Eclectics, Mesmerists, Kneisopaths, etc. Viewing the homœopathic system of practice from a rational, scientific standpoint, it must be regarded as the least worthy of attention of any now popular in this country. Indeed, we know of no system so indefensible as that which is engaging the attention of the honorable Senators. With no desire, however, to prejudge a question of so much importance, but earnestly seeking the welfare of our sick soldiers, we deem it our duty to contribute to our legislators such information as may be in our possession, in the hope of aiding them in the formation of correct opinions as to the merits of the medical régime which they are urged to establish in our military hospitals.

This is not the first time that a government has been petitioned to recognize homœopathy, and grant it special privileges. Many European states have not only been thus petitioned, but have granted the prayers of the petitioners, and thoroughly tested its merits. The results of these trials will appear in the course of this article. Similar efforts to have public hospitals placed under their charge have also been made in this country by the partisans of Hahnemanism. On the occasion which we shall now notice, the whole subject was so thoroughly sifted, and the false pretensions of this system so completely exposed, that a quietus was put to their aspirations.

In the year 1857, a resolution was introduced into the Board of Governors of the Almshouse Department, New York, providing "that one-half of Bellevue Hospital should be set apart for the practice of homœopathy." A select committee was appointed to report upon the subject, of which the Hon. Washington Smith, one of the most intelligent civilians of the city, was chairman. The able Report, which this gentleman produced, bears evidence, on every page, of an unprejudiced review of the merits of the system, when thoroughly tested in hospital practice. We earnestly commend to the serious consideration of our HONORABLE SENATORS the following extracts from this report.

Alluding to the alleged claims of homœopathy on the ground of its popularity, the committee advance the following just opinions:

"That this system is wide-spread, and that it has adherents among the intelligent portions of the community, is an argument that applies with equal force to every system of medical empiricism. The opinion of a man of simply general intelligence, has properly no weight in regard to any new theory and its application to practice in any department of the arts or sciences. We should naturally look for a reliable opinion of the merits of such theory to the scientific cultivators of the art in which its application is proposed. Thus tested, the homœopathic system must utterly fail to receive our sanction. We appeal in vain to its adherents to point to a single medical man among its advocates in this city, whose scientific attainments in his own profession would entitle his opinion to our confidence. In no department of science is there more activity in the investigation of the principles upon which it is based, more acuteness in observation, or better logic in the deduction of practical precepts from such principles and observations, than in medicine. And yet the records of science show that all those who truly advance the several departments of medicine, all, without exception, both in this and foreign countries, belong to the ranks of the so-called regular system."

But the Board was urged to grant the request because so many petitions were presented to them from respectable citizens. To this suggestion the Report replies:

"But whence do these petitions emanate? Do they come to us from the inmates of the hospital who are to be the subjects of the experiment? Do the sick who crowd the wards complain of the incompetency of the medical officers, and of

the inefficiency of their treatment, and petition us to change their medical attendants, and introduce a new system of practice? Do these petitions even emanate from the honest laboring classes of our city, whom the vicissitudes of life and the misfortunes of poverty may at any moment remove to the wards of Bellevue for relief to their bodily ills? These are questions which this Board would do well to ponder before it acts."

The body of the Report consists of a careful collation of evidence bearing on the propriety of introducing this system of practice into public hospitals.

"But we are not left to simple conjecture as to the actual success of homœopathy as a system of medical practice. It is our duty, however, to inquire simply as to its success in hospitals; and on this head statistics are sufficiently numerous to prove its entire inefficiency and utter failure wherever it has been tried. The following statistics have been collected with care from authentic sources:—

"In 1829, by order of the King of Naples, a commission was appointed to test homœopathic remedies, under the following restrictions:—1. The Commission shall consist of two professors of the University of the Faculty of Medicine, two members of the Medico-Chirurgical Academy, two members of public instruction, and the heads of the hospital. 2. The Commission, after having proved the attenuation of the homœopathic remedies, shall place the said remedies in a strong box, firmly closed, with two different locks, the keys of which shall be returned, one to the Director of the Clinique, and the other to the commissioners charged with following the treatment. 3. The clinical ward shall have but a single door, guarded by a sentinel; its internal arrangements shall be adapted to health; it shall not contain more than fifteen to twenty beds, and two assistant physicians, one chosen by the attending physician, the other by the commissioners, who shall keep an exact register of all that happens to the patients, the changes in their diseases, their regimen, cures, and deaths, if any die. 4. The admission of patients affected with acute or chronic diseases, shall be left to the choice of the attending physician and commissioners, with this condition, that the attending physician shall not be obliged to take patients known to be incurable; nor shall diseases equivocal be considered proper for positive experiments. 5. The commissioners having selected the class of diseases, the attending physician shall make known the symptoms, administer the remedies, and pre-

scribe the regimen. 6. Each day the condition of each patient shall be determined by the attending physician and commission. The result of this trial of forty days of homœopathic treatment under the observation of the commission named by the King of Naples, was the conclusion that not only is this treatment of no effect, but that in certain diseases it has the inconvenience of preventing the employment of remedies capable of effecting a cure. The physician in attendance was M. de Horatus, author of a homœopathic work, and who had boasted of the most marvellous cures.

"Clot-Bey, Physician in Chief to the armies of the Viceroy of Egypt, states (*Annal. de la Med. Physiolog.*, Sept. 1834, *Ency.*, Decr. 1834) that a German homœopathic physician petitioned the Council of Health to try this system in the Hospital of Cairo, alleging its cheapness, etc. He was allowed to select, and chose patients suffering from opthalmia and dysentery. The Counsel were convinced from this experiment that the homœopathic system was not entitled to their confidence. The following is the conclusion of the Report of the Council of Health: That the cures obtained were due simply to the hygienic and dietetic treatment adopted, and not at all to the infinitesimal doses. So unsuccessful did this trial prove, that the homœopathic practitioner was obliged to abandon the country.

"In April, 1832, a ward with thirty beds in the Hotel Dieu de Lyon was placed in charge of M. Guerard, the most distinguished homœopathic physician of that city, with liberty to select his patients. He selected fifteen, suffering from febrile affections, pneumonias, erysipelas, catarrhs, etc. He visited them daily, and in presence of sixty students and several physicians, examined, prescribed homœopathic remedies, and directed the regimen. The experiment continued seventeen days, when the physician voluntarily retired. During this time there was no improvement in patients, nor advantage gained which could be ascribed to the homœopathic treatment. The physician attributed his failure to the action of deleterious miasma *always existing in hospitals*, and from which he could not protect his patients, He acknowledged that the remedies which produced such powerful effects in private practice, utterly failed in hospitals, owing to the emanations from the bodies of persons collected together, which neutralized the infinitesimal doses.—*Gaz. Med. de Paris*, *Ency. Nov.* 1833.

"In 1834, M. Andral employed homœopathic remedies in

one hundred and forty cases, in the Hopital de la Pitie of Paris. The arrangements of the ward, the regimen of the patients, and all the details of treatment, were carefully managed according to the directions of Hahneman. The remedies were all obtained from the most eminent homœopathic apothecary in Paris, and administered with the most religious exactness. The result of this trial proved the entire inefficiency of the remidies employed. It was found necessary in most of the cases to resort finally to the regular treatment.—*Bull. Gen. de Therapeut.* 1834.

"In 1835, the Homœopathic Society of Paris petitioned the authorities to establish a Homœopathic Hospital and Dispensary. The minister referred the matter to the Academy of Medicine, which appointed a Commission to draw up a report. This Commission reported in substance as follows: That they had submitted the system of homœopathy to the most rigid tests in practice, without obtaining any other than negative results, so far as the action of remedies was concerned; while observation proved that grave dangers were liable to follow its adoption in severe diseases, from the neglect of proper and reliable remedies. If the authorities yielded to this request, the advocates of Mesmerism, animal magnetism, etc., were equally entitled to have hospitals opened for the trial of their peculiar systems, and thus every form of quackery would demand attention. They therefore advised that the petition be not granted. The Minister of Public Instruction, acting upon the advice of this Report, refused the petition.

"In 1829, the Czar of Russia ordered that the system of homœopathy should be tried in several military hospitals. For several years the practice was continued, and reports of marvellous success were annually published, but it has entirely failed of obtaining the confidence of Government, and by a recent edict it is forbidden to practice homœopathy in the Russian territories.

"Homœopathy and allopathy were tried (*Ency. Jan.* 1836) in the Hospital of Fultschin for two months, with the following result:

	Entered.	Cured.	Died.	Remaining.
In Allopathic Hospital,	457	364	—	93
" Homœopathic "	129	65	5	58

"Piorry states that he has tried numerous experiments with homœopathic remedies in Hotel-Dieu, all of which failed."—*Ency. Apr.* 1835, *Soc. Sav.* p. 88.

"Bally used homœopathic remedies four months in l'Hotel-Dieu, with the following result, 'pas un malade n'a été guéri par l'homœopathie."

"Dr. Guillot, of the Salpetrière, gave six beds to the homœopathists, in 1849, for the treatment of cholera. Of seven cases treated, all died.—*Lancet*, 1849, v. 4, p. 542.

"The percentage of mortality in the Homœopathic Hospital of St. Petersburgh, 1833–34, was sixteen and two-thirds per cent.—*Ency. March*, 1835. *Rev. Med.* p. 41.

"Although homœopathy has existed nearly half a century, and boasts of having overspread the civilized world, and received the special patronage of the wealthy of every community as well as a government sanction, it claims for itself to-day but seven hospitals in which it is practised on the entire continent of Europe; and within the last year or two several of these have been closed. The great Homœopathic Hospital of Vienna, which has published annually the most wonderful results of treatment, and as far as its reports gave evidence, was entirely successful, has recently ceased to exist.

"The Homœopathic Hospital at Leipsic, the home of the founder of this systsm, ceased with the death of Hahnemann. The London Homœopathic Hospital has recently closed its doors.

"But we need not multiply facts of this kind: enough has been given to prove to the entire satisfaction of your Committee, that this system has been thoroughly tested in hospitals, and found entirely inefficient. It is quite true that hospitals established by its partisans have published reports of the most flattering success of treatment, but they must be rejected in this discussion, because partisan. If such reports are reliable, why the failure of these very hospitals? Why is the homœopathic system expelled, not only from the hospitals of Russia, in which it has had years to establish itself, but even from the Czar's dominions?

These are questions of grave import, and may well give rise to the inquiry in this community, Why are the sick poor of our city selected to be made the subjects of an experiment with this system of medical practice which has so repeatedly failed when put to test of rigid investigation? If the curiosity of the few *must* be gratified, why not choose the criminal for the experiment?"

With such facts before them, the Committee came to the following conclesion:

"The just pride of every civilized and christian community

is its public charities. They are not only the criterion by which we may estimate its christian philanthropy, but also its progress in the arts of civilized life. Well may the citizens of London, of Paris, and other continental cities boast of their hospitals, the growth of centuries, and the merited recipients of public and private endowments. To them flock the students of every country, and from them emanate men learned in the laws of health and disease, and skilled in all the subtile arts of healing. They are demonstrating with mathematical exactness the fact, that wisely and judiciously managed, the average of human life may be materially lengthened. So important, indeed, have they become to the well-being of the people, that they are incorporated with state and city governments. Well may we, under whose fostering care the public charities of our city are placed, inquire what is the character of the medical officers under which these hospitals have attained such celebrity! The answer, without exception, is, that they are of the same school of education and practice as that under the management of which Bellevue Hospital has for the last ten years so signally prospered. They have been men of professional learning, eminent as citizens, and often as statesmen, but always of one school—the so-called regular practice."

No unprejudiced mind can review such facts, without concluding that public authorities who deliberately consign the helpless and confiding sick to the charge of medical men, practising a system so inefficient, incur a fearful responsibility. And that responsibility assumes a tenfold importance when the sick, who are to be subjected to this experiment, are the citizen soldiers who have sacrificed the comforts of home in defence of their country. Around them Government should throw its protecting care, and tenderly guard their sick beds from the ruthless hand of medical charlatanism.—*Am. Med. Times.*

MEDICINE AMONG THE MORMONS AND THE INDIANS OF NORTH AMERICA.

It may be remembered that in the Autumn of 1858, the United States sent a military expedition to Utah, against the Mormons. The Reports* of the Surgeons who accompanied

* "Statistical Report on the Sickness and Mortality in the United States Army, from 1855 to 1860." Washington.

the expedition and saw something of Mormon life, are of great value, as showing the effects which complete isolation and gross religion, whose very essence is Polygamy, have produced on the physical stamina and mental health of that saintly community.

Among the males, sexual debility, with its concomitant evils, is stated to be the most common result of this premature stimulation of the sexual passion, and the facilities of gratifying it. Among the women these same causes show their pernicious effects, not in diminution of generative power, but in physical deterioration of the offspring. The women are even remarkable for their fecundity, but their children are ill-nourished and cathetic, a large proportion of them dying in infancy, and those who *do* live to maturity, looking feeble, sickly, stunted, and (the males) emasculate. Mormonism appears to have made its impress on the countenance in a remarkable manner. "There is an expression of countenance," says one of the Surgeons, "and a style of feature which may be called the Mormon expression and style—an expression compounded of sensuality, cunning, suspicion, and smirking self-conceit. The yellow, sunken, cadaverous visage; the greenish-colored eyes; the thick protuberant lips; the low forehead; the light, yellowish hair; the lank, angular person, constitute an appearance so characteristic of the new race, the production of polygamy, as to distinguish them at a glance. The older men and women present all the physical peculiarities of the nationalities to which they belong; but these peculiarities are not propagated and continued in the new race; they are lost in the prevailing Mormon type."

The Mormon faith inculcates that diseases can be cured only by miraculous interposition; consequently, the secular professors of the healing art are not much patronized. "The Church authorities are exceedingly jealous at an attempt to cure by ordinary therapeutics, and denounce from the pulpit any invasion of their special province. Though they claim for the laying on of hands wonderful efficacy, the number of deformities—the result of malpractice, to be seen in any of the populous towns—rather indicates a necessity for the use of carnal means. The art of surgery is at a low ebb."

The only disease peculiar to the Utah Territory is what is called in the reports "Mountain Fever." The minute descriptions given of this disease leave no doubt in our mind that it is nothing more than a form of periodical fever, modified by elevation and other hygienic conditions. The persons who

most suffer from it are the trappers and Indians when following the rivers to their mountain sources for the purpose of trapping beaver. With this exception, no diseases of a severe character prevail in the Territory, the climate of which is unrivalled for healthiness. In the different reports much uncertainty is expressed whether this "mountain" fever owns the same cause as ordinary intermittent fevers; but when we read the topographical descriptions of the localities where it prevails and the seasons to which its prevalence appears to be restricted, we cannot for a moment doubt that both kinds are attributable to the same, and to no other, efficient cause, viz: marshy ground in the process of drying under the influence of solar heat.

The reports of the Army Surgeons, located at the various military posts in Utah, state that the climate of that country exercises singularly beneficial effect upon phthisis. They were stationed in that Territory from the autumn of 1857 to the spring of 1859, a sojourn long enough to render their observations, both on this and on other matters, worthy of our credit.

The Utah Territory has an average elevation of about 6000 feet above sea level. It consists of ranges of hills, with intervening broad table lands, valleys and streams. What renders its climate remarkable is its *equability and dryness.* Although strong south-westerly winds are almost constantly prevalent, and the range of temperature in the course of the year is considerable (from about 90 deg. in summer to about 20 deg. in winter), *sudden vicissitudes* of temperature are very rare; the summers being regularly hot and the winters regularly cold. The absence of moisture is indicated by the hygrometer and by the freedom of arms and surgical instruments from the slightest traces of rust. The great dryness is stated to render the extreme cold much less appreciable to the senses, so that a smaller amount of clothing is necessary than in latitudes warmer but moist. Such being the nature of the climate, the reports show that the prevalence and mortality of phthisis are much less at the Utah station than at any other military district in North America. In 1858, out of 5,842 men stationed in Utah, only eight cases of phthisis occurred, and only one of these proved fatal. The freedom from pulmonary complaints of *all* kinds in this country, is equally remarkable. That this comparative immunity from phthisis, and lung disease generally, is due rather to peculiarity of climate than mode of life, seems clear from the fact that those, on whom the observa-

tions have been made, are soldiers—a class of men whose habits are much the same everywhere. So notorious is the healthiness of these high regions of the far West, that the subjects of hereditary or acquired predisposition to phthisis or scrofula, as well as other invalids, have for some time past been largely migrating to them, as being the climate of all others in North America the most suitable for their maladies. The journey across the plains from the Atlantic States is not now nearly so formidable an enterprise, as it was a few years back. Along the great roads constituting the overland route to California, the journey to the West can now be accomplished without danger or delay. So much for Utah, its inhabitants, diseases and climate. We will now turn to some of the adjacent Indian tribes of North America, concerning which we find several interesting details in the reports before us.

Intemperance and disease, especially syphilis, scrofulas phthisis, small-pox, cholera and fever—coupled with the evil, incident to a state of almost perpetual warfare—are said to be slowly exterminating the aboriginal inhabitants of North America. Another influence, tending in the same direction, is the steady advance of civilization, the restraints of which are incompatible with the nature and habits of these children of the forest. As the Indians will not blend with civilization, they must recede and dwindle away before its onward progress. The Indian, when his natural habits are interfered with, "feels himself a prisoner and deprived of his dearest rights; his spirit is broken, and with the change of diet and wearing apparel, and being deprived in great measure of his natural exercise, disease takes hold of him and he sinks under it. As a general thing, deprive an Indian of his accustomed exercise and give him plenty of beef and flour, he gets dysentery; and when he changes his wearing apparel, laying aside the open blanket and putting on the white man's tight coat, and lies down to sleep, his lungs take on disease, and soon become full of tubercles." Such is the testimony of the American Surgeons who have lived among them and closely watched their ways.

The Indian tribes are said to have no regular physicians among them. The "Medicine man" is a sort of half priest, half doctor, who possesses mysterious remedies, and is regarded with superstitious awe. Among many of the tribes, especially those on the frontiers of civilization, there are swarms of traveling charlatans and heartless quacks, who ply their trade with success proportioned to the unbounded credulity of

the buyers of their vile nostrums. Phthisical patients are generally left to their fate. Phthisis is one of their commonest diseases, and as it is regarded by the majority of the Indians as communicable by contagion, especially among the family of the afflicted individual, the poor sufferer has to drag out the most miserable solitary existence, till death relieves his sufferings. Barring the use of a few inert remedies of a domestic nature, diseases in the majority of cases is left to run its course. Some tribes, on the other hand, adopt methods of treatment altogether the reverse of the expectant. The New Mexican Indians, for instance, suffer much at certain seasons of the year from intermittent fever; and for the cure and prevention of this disease, large numbers of them assemble once a year (in the spring), and for the space of three day swallow frequent draughts of the infusion of some powerful herb, which causes violent vomiting and purging. This is called a "Medicine Feast," and is supposed to cure the fever where it already exists, and to fortify the system against its attack during the ensuing summer and autumn. Whether as a curative or as a prophylactic measure it is attended with any success, is not stated.

The New Mexican Indians have another annual gathering, a "feast" of a more truly festive description than the one just mentioned. It takes place in the winter, on the mountains, when they "distil a nasty, filthy kind of liquor from corn, which is known among them as *tiswing*, of which they are passionately fond, and never lose an opportunity to get gloriously drunk, whenever a little corn can be procured to make it from. Their mode of distillation is as novel as it is simple. The corn, procured by stealth, or as a 'forced loan,' is steeped for twenty-four hours, then placed between the scanty folds of of the family couch to ferment* beneath the bodies of the lusty warriors, whose slumbers are soothed by bright dreams of 'the good time coming,' when all shall be assembled at the festive wigwam to partake of the intoxicating pleasures of this unpretending beverage. The malt is now coarsely ground, a certain amount of water added to it, then placed in earthen vessels and allowed to ferment for forty-eight hours, at the end of which it is used without straining or any other process. The better to enjoy 'the feast of reason and the flow of soul,' these votaries of Bacchus prepare themselves by a solemn fast of forty-eight hours previous to the commencement of the festal

*The writer evidently means "to germinate."

joys, for the purpose of enjoying the most profound spiritual impressions—in other words—they get 'right royally drunk,' on empty stomachs. Were it not for this precaution, the mild character of the beverage would fail 'to make the drunk come.' "

The Oregon and many other Indians have one chief remedy for all internal diseases. This consists of a hot vapor-bath followed immediately by a plunge into a cold stream. Such is their mode of treating small-pox, for instance; the result in almost every case is stated to be fatal.

The North Californian Indians treat disease in a manner totally different from that of the Indians east of the Rocky Mountains. They resort neither to the animal, nor vegetable, nor the mineral world for a cure. "Their philosophy of disease is based upon the idea that an evil spirit of some dead Indian steals into the body and locates himself, and wherever the pain may be, there the spirit is. Their system of therapeutics is perfectly compatible with their notions of pathology. Their doctors are always females, and none are called to practice except those who are commissioned as it were by nature. When a young squaw chances to have a slight periodical hæmorrhage from the mouth or any other part than the natural channel—in other words, if she should have vicarious menstruation,—she is the one who for ever after is destined to heal the sick. The young squaw is not at all covetous of her calling; she dreads her profession, for on her failure to effect a cure, she loses her life. Her art of medication consists in working herself up into a mesmeric or hysterical condition, and then making passes over the part diseased, and lastly plunging her fists into the muscles of her prostrate patient, as if she were really determined to tear out and expel the dead Indian's evil spirit in good earnest. Then, again, the doctress throws herself into a gladiatorial position, being surrounded by a dozen or more 'bucks,' who assist in the performance by chanting and howling like so many demons; and then she throws herself with her whole weight on her subject, clinching the part diseased, and if she is lucky she drags out the evil spirit (with a portion of the patient's skin,) and dashes it into a vessel of water ready for that purpose. If the patient is satisfied that he is relieved of the dead Indian's spirit and the pain, all is right; but if the pain chances to return, the poor squaw loses her head under the tomahawk."

The climate of California would appear to be singularly healthy and invigorating. In one of the Medical Reports for

that country, it is mentioned as a notorious fact, that when females from the Atlantic, or from the inland States, go to live in California, their uterine functions assume a greatly increased activity; that menstruation becomes much more copious; that those who have been barren for years, and those who have never been pregnant at all, after a short residence in their new climate, are almost certain to become "joyful mothers of children." The veneral propensities of the other sex are said to derive a fresh impulse under the same circumstances. It is further stated, as a matter of fact, that the fecundity of cows, sheep and pigs, greatly increases, if they are brought from the plains of the interior to the Californian coast. We should receive such a statement with great distrust, were it not made in such an unhesitating and unqualified manner by a medical gentleman in the United States Army, whose residence in the country must have given him abundant opportunities for investigating the truth of the matter.

Child-bearing among the Indians is stated to present the same delays and accidents as among the civilized inhabitants. In tedious labor pressure is made on the abdomen with the hand, and, if this does not expite matters, a hoop is placed round the waist, and forced downwards. Hence we are not surprised to hear that prolapsus uteri is no common among them.

Syphilis is exceedingly rife among the Indian tribes, but more so in the southern than the northern parts of the continent. Two reasons are assigned for this in the report: 1. From the middle of the sixteenth century up to the present time, the Spaniards have been mixed up with the aborigenes, and have freely sown the seeds of the disease among them. 2. The Spaniards seldom visit the northern parts, and if they do, the colder and purer climate renders the virus less infectious and more likely to give way under the influence of natural causes. The northern and central tribes believe the disease to have been disseminated among them by the Hudson Bay traders; not under the natural impulses of sexual passion, but with the "pale-faced," cold-blooded design of undermining their strength and thinning their numbers. Scoundrels as many of these traders undoubtedly were, one is loth to impute to them such villainy as this.

So terrible have been the ravages of syphilis, that the Indians of New Mexico have had the wisdom to adopt penal measures, which are found greatly to check the spread of that disease. Any member of their tribes, who is known to have

contracted the disorder, is either tomahawked forthwith, or, like the leper of old, excluded from all intercourse with his cleaner fellowmen, and abandoned generally to die of starvation. Dread of a puuishment, so certain and so terrible, makes them cautious about exposing themselves to the chances of infection.

The following novel mode of treating retention of urine, is related in one of the reports:—In 1857 an unfortunate half-bred Frenchman applied to the Surgeon at Fort Randall, in Nebraska, for the relief of stricture of his urethra, which had been caused by gonorhœa contracted twelve months previously. He had suffered several bad attacks of retention, and on one occasion had been obliged to have recourse to the skill of an Indian doctor, whose mode of treatment, whatever may be said against it, possessed, at least, the triple merit of novelty, simplicity and success. The doctor applied his lips to his patient's penis, and by repeated vigorous efforts at suction, drawing off a *bon-bouche* at a time, managed at last completely to relieve the enormously distended bladder. It had been previously stipulated that the poor Frenchman, as a consideration for the service for the service performed, was to give the doctor his only horse. We have heard of the Hindoo surgeons using suction for extracting a cataract after incising the cornea; but the above application of nature's suction-pump for the relief of suffering humanity struck us an idea truly original, though we have since seen, in an old number of the *Gentleman's Magazine*, that an English surgeon performed the same officer for Fernandino, one of the Earls of Derby, in the seventeenth century. We place the hint at the disposal of the profession. The ingenuity of some enterprising surgical mechanist may, perhaps, turn it to account and reproduce it in some more palatable form, such as the exhausted glass air-chamber used by Sir Philip Crampton, to remove fragments of broken calculi with viscid mucus from the bladder after lithotrity, or the powerful syringe we have ourselves used for the same purpose.—*London Medical Times and Gazette.*

ON THE ELIMINATION OF MERCURY FROM THE SYSTEM.

Dr. Schneider has recently made some researches on the elimination of mercury during and after a mercurial treatment, which have given the following results:—During the internal administration of such preparations, the electrolytic examination of the urine shows always traces of mercury; but the quantities are so small that the amount of urine discharged within twenty-four hours is often not sufficient for a satisfactory result, and the metal must be searched for in the whole of the urine discharged within three to six days. Traces of mercury were also found in the urine of a patient who had not taken any internally, but had been treated with mercurial ointment. The elimination of the drug by the urine lasts for some time after the mercurial ointment has been discontinued. In the first week afterward it is invariably found, and in two cases it was even discovered in the fourth and the sixth week afterwards. After six weeks, Dr. Schneider has never succeeded in discovering traces of mercury by electrolysis. The elimination of it is not promoted by the administration of iodide of potassium, as the quantity of mercury contained in the urine was not at all increased, but rather diminished, when that drug was given; and if it was taken a few months after the end of the mercurial treatment, mercury did not reappear in the system, probably because nothing was left behind. One patient, who had suffered with mercury (the last time very energetically, having used twenty drachms of ointment, equal to more than 120 grains of mercury), died of pericarditis two months after the third course, and Dr. Schneider could therefore search for mercury in the internal organs. The result was that the bones, the brain, and the spleen, which are generally believed to retain mercury for years, did not contain a trace of it, while the kidneys showed an infinitesimal quantity of the metal, the result of the examination of the liver being doubtful. It is, therefore, evident that mercury entirely disappears from the system a short time after the end of treatment, and cannot, therefore, cause secondary syphilitic symptoms; nor can it be eliminated from the system years after the treatment by Dr. Caplin's electro-chemical

baths. In two cases of hydrargyrosis, considerable quantities of mercury were discovered in the urine, and in the one of them, which ended fatally, also in the internal organs, especially in the liver. Urine which contains mercury does not necessarily contain albumen also; but in the two last-mentioned cases of hydrargyrosis there was albumen in the urine. The saliva which is collected during a mercurial treatment does not contain any mercury. The quantity of mercury which is eliminated after the end of the treatment amounts to about one fourth of that actually administered.—*Boston Med. Journal.*

NOTES OF CASES IN SURGERY.

By FREDERIC C. SKEY, Esq., F. R. S.,
Surgeon to St. Bartholomew's Hospital.

The leisure hours preceding the commencement of the ensuing medical session enable me to recall to my recollection some of the more remarkable examples, whether of disease or of injury, that have fallen under my charge during the past year in the wards of St. Bartholomew's Hospital. Of these cases I propose to give a general sketch, in the hope that they may prove not unacceptable to some of my professional brethren who, by the exigencies of practice or the remoteness of their locality, are deprived of the advantage of an occasional visit to the wards of an hospital.

Fractured Bone.

I commence the task I have assigned myself by referring to the cases of fractured bone, of which the supply to my own wards has been amply sufficient to meet the wants of the most earnest students of his profession. Three hundred and twenty-one cases of *fracture* in general—of which nineteen were compound—have been admitted in the thirteen weeks in which I have been on duty. The single week at Christmas last produced no less than forty seven cases. Three cases of compound fracture appeared to me to demand amputation. In several others the injury was great: some to muscles, while in some the bone was greatly comminuted. In four or five, hæmorrhage followed either primarily or secondarily.

I quote one case of some interest, arising from the great extent of the injury, which was far greater than would twenty years since have warranted the decision arrived at:

A man, aged forty-six, was admitted in December last with extensive laceration of muscles and integuments of the lower end of the right forearm and comminuted fracture of both bones, caused by machinery. The question of amputation was one of difficulty, arising from the extent and complication of the injury. I confess I was influenced by the fact that the man was the father of a large family, and that the loss of his right arm would be fatal to his occupation. He was a healthy man, of abstemious habits; and, moreover, I entertain a strong impression that the amputation of a limb—certainly of a forearm—may be undertaken with equal, if not greater, safety at the expiration of a few days as at the date of the accident. We have yet something to learn on the subject of "primary amputation." The forearm was "put up." Slight hæmorrhage from the radial artery occurred on the seventh day, and profuse on the ninth, when the artery was tied. The man was greatly reduced by the loss of blood, his vital powers being sustained for several days by brandy, in half-ounce doses, frequently repeated; the quantity determined by the pulse. The man was discharged in the twelfth week from the date of his admission, with a limb sufficiently restored to its natural functions for the resumption of his pursuits as a printer.

In weighing the question of amputation of a limb for serious injuries, there is something beyond the amount of damage done to be taken into our calculation of the probable future. I allude to the subject of constitutional health, whether primary, or determined by the habits or occupation of the individual. These are questions not readily determined on early inquiry, and some days may elapse before the real power of the individual to avert or contend against disease is ascertained by the surgeon. The vital powers may suddenly fail at the time they are most required. I lost two cases of compound fracture of the leg, in which the extent of injury was far less in degree than several others which ultimately recovered. It may be said, I should have done well had I at once amputated these limbs. The result proving fatal, doubtless the operation of immediate amputation would have presented an alternative, possibly a more favorable one, but this *ex post facto* reasoning is of little value when placed by the side of general principles, which proclaim aloud the paramount duty of the surgeon to save, and not to destroy.

Simple fractures of the leg I have treated commonly by means of the application of a large pillow whenever the displacement has been moderate. When great, or the fractures very oblique, with a tendency to retraction, I have resorted to the cradle with side splints, a positive objection to which is the liability to protracted ulcerations of the heel.

Of fractures of the leg of the more ordinary kind, some 35 cases have recovered thoroughly well by the application of the pillow, which is an efficient and by far the most comfortable agent I know in the treatment of this injury, a well-made flock pillow will answer this purpose well. It should be of length sufficient to reach above the knee, and extend some inches below the foot. When bound on to the leg by means of four or five straps with buckles, which are drawn very tight, the pressure, as is well known, is diffused over the entire surface of the leg, and it is unproductive of pain or of such an amount of discomfort as to prevent sleep on the first night following its application.

Strangulated Hernia.

The cases of strangulated hernia have presented in about the average number in the year, and in their arrival they have observed the same irregularity which has so frequently excited observation from others—viz: to their appearing in groups, of two or three within so many days. I do not know that I have ever operated on two cases of hernia identical in character. Each case has its own peculiarities, presenting features distinct from any other. Where such features are so peculiar as to involve the question of treatment, or to determine the course of operation required for it, the examples claim attention as cases of more than usual interest, and of such I shall refer to three.

The first is that of an old woman, aged eighty-eight, admitted in May last. She was the subject of double hernia, femoral on the right, and inguinal on the left side. The right presented a hard and painless swelling, which, according to the old lady's positive declaration, had existed in its present condition for many years. It gave her neither pain nor discomfort. The left swelling was large, soft, and painful. Examination by the hand was invariably followed by sickness and by shooting pain into the abdomen. In fact, she referred her own symptoms exclusively to the left side, declaring as she pressed her hand on the right swelling that it had nothing to do with her present malady. I thought I succeeded in

returning a portion of the mass into the abdomen; but the symptoms continued, and I decided to operate. The woman being placed under the influence of chloroform, with the concurrence of my colleagues, Messrs. Lawrence, Stanley, and Savory, I exposed the mass on the left side. The sac contained omentum only, and a part of which was readily returned through an opening which admitted a finger without effort. The right swelling was left untouched; this decision being arrived at on the positive assurance again and again given by the patient that she had never suffered a moment's pain or inconvenience from the swelling in the right groin, and also from the probability that intestine had been returned, before the operation. The symptoms, however, continued unrelieved; vomiting and constipation were as urgent as before, although her constitutional powers appeared little reduced by the previous discipline. On the following day I operated on the hard and insensible swelling in the right groin. On opening the sac, a quantity of venous blood escaped. A large knuckle of small intestine formed the mass of the swelling, which was highly congested with blood, and was shut off from the abdomen by a very slight stricture, which was divided with some difficulty. The peculiar features in this case are—first, the double hernia; secondly, the peculiar sympathy manifested by the stomach, as the dominant organ of the abdomen, with the tumor on the left side where there existed a strangulation; and thirdly, the entire absence of physical pain connected with the femoral hernia of the right side. Although the sickness and vomiting were no doubt maintained by the condition of the strictured intestine of the right side, yet the immediate relationship between the stomach and the tumour of the left side was so striking as to attract the observation of my colleagues as well as myself. This fact, the entire absence of local pain on the right side, and the woman's repeated request that we should "leave the right side alone," decided the question of the operation to be selected. At the time, the evidence appeared good, so far as it went; but it is quite obvious it was unsound at bottom, and led to a false diagnosis.

The second case was that of a man, aged thirty-eight, admitted in July last. He was a man mentally characterized by a low order of intellect, and incapable of a connected statement of his symptoms. It was extracted from him, with some difficulty, that he first became the subject of hernia twelve months prior; that the hernia returned without effort

on his part on lying down; that he had a second attack six weeks previously, which also yielded to simple pressure and position; and that his present condition had existed consequent on a third attack of three or four days. He was visited by a medical man, who administered a full dose of calomel-and-colocynth, and leeched the swelling freely, but without apparent benefit. On inquiry, we ascertained that he had been the subject of a discharge from the urethra, and had passed his urine with difficulty. The course of a catheter was obstructed at two inches from the orifice of the urethra. The local condition was as follows: Right inguinal canal much swollen; left slightly so; scrotum very largely but uniformly distended with fluid; penis involved in the general swelling; perinæum also greatly enlarged; constipation of four days, but no abdominal pain; violent sickness of greenish matter; pulse intermittent. Thus were presented, with tolerable distinctness, groups of symptoms of two diseases bearing no relation to each other. The aspect was that of extravasation of the urine; the symptoms of those of strangulated intestine. It is true that the swelling of the right groin belonged to the *canal*, and not to the *subcutaneous tissues;* and this fact formed an important element in the diagnosis. On the one hand we had obstinate constipation, the evidence of previous rupture, distension of the inguinal canal, and violent and scarcely remitting sickness; on the other, stricture, impermeable to a small catheter, with urethal discharge and local appearance which we are far more accustomed to identify with extravasation of urine than with hernia. The *history* was that of hernia; the local *aspect* that of extravasation. There could be little doubt of the presence of hernia, whereas that of extravasation was more uncertain, and of the two diseases less critical. I operated for hernia. The sac was in a condition of large and general suppuration, the effects of which had involved all the surrounding parts, scrotum, penis, and perinæum. The intestine was marked by numerous gangrenous patches. I selected one of the smaller of these, and punctured it with a trocar, when a large quantity of purulent fluid escaped. I divided a tight stricture, tied up the aperture with a fine silk thread, and returned the intestine into the abdomen.

A woman aged thirty-nine, three months advanced in pregnancy, admitted in May last, fifteen hours previously was seized with sudden pain and a swelling in the right groin, consequent on an attempt to support a child at arm's length;

vomiting quickly followed. The right groin, on admission, was the seat of a small hard knot, on which no impression could be made by the hand. I operated within two hours after her arrival, and on opening the sac nearly two pints of watery fluid, as near as we could calculate, escaped from the peritoneal cavity. The intestine, which was gorged, but not unhealthy, was returned into the abdomen; vomiting ceased. The main feature in this woman's case consisted in the discharge of an immense quantity of fluid, of a yellow color, and containing flocculi, through the wound from the abdominial cavity. The bowels acted freely on the third day. On the fifth she died. No post-mortem examination was permitted. It was not, however, very essential to the explanation of the cause of death.

One word on the subject of the division of the sac in cases of hernia. The operation of non-division has, I confess, disappointed me; and I am disposed to concur with many other authorities in the belief that the advocates of the operation are not borne out in their estimate of its supposed advantages; such, at least, is the result of my own personal and necessarily limited experience in the practice of St. Bartholomew's Hospital. The operation of strangulated hernia, although the theory is obvious enough, and the object to be obtained clearly understood, is often an operation of considerable difficulty and of anxiety to the surgeon operating; and in a large number of cases a young surgeon is not indisposed to suspend for the moment his "pride of place," and to avail himself of the advice and co-operation even of his assistant, certainly of his seniors, should such be present. I consider the difficulty of the operation, as a rule, considerably increased by the attempt to divide the stricture from without inwards; or, in other words, without opening the sac which surrounds the intestines.

Dislocation.

Of thirty-five cases of dislocation, a few only have fallen under my own immediate charge. I may allude to one example of dislocation of the femur occurring in the person of a stout boy of sixteen. The head of the bone was thrown backwards on the dorsum acetabuli, and it resisted the combined force of four persons engaged in extending the limb while the boy was under the influence of chloroform. On remitting the extension, the bone was reduced by bending the thigh forwards on the pelvis and drawing it outwards. Of

seventeen cases of dislocation of the humerus, in one only was the head of the bone thrown on the dorsum scapulæ. The above list includes a case of dislocation of the coccyx, some particulars of which may be worthy of notice. The subject was eminently sensitive and hysterical young woman, aged twenty, who sustained the injury by a fall in the street three weeks prior to her admission into the hospital. At the date of the accident she was too far advanced in pregnancy, and she miscarried in the internal. Examination detected displacement of the bone, which was thrown forwards at a right angle with the sacrum, the point projecting against the rectum. Tolerably firm pressure made through the bowel readily replaced it, but it returned to its abnormal position immediately on the remission of the pressure.

My first intention was to operate on the bone from within, and with this view I designed a metal spring, as thin in the neck as was compatible with strength, to be introduced into the rectum; but the difficulty of fixing it to the plevis, and of employing the exact force requisite, was insuperable; besides which, I had no experience as to the capability of the bowel to bear the required pressure for many days, and probably weeks. I then determined on the experiment of direct traction of the bone, and, having cut down upon it, passed a thin silver wire around at about three quarters of an inch from its extremity. The wire broke, and I replaced it with a large silk thread, which was drawn tightly round the point of a broad wooden splint adjusted to the woman's back. The experiment, however, was not very successful; symptoms of very active hysteria manifested themselves, and she declared the pain to be insupportable. Some amount of local irritation certainly attended the progress of the case, with local redness and moderate suppuration, but not to an extent commensurate with her suffering. She wore the instrument twenty days, during the whole of which she declared the pain very severe. For a few days she appeared relieved; but the bone returned to its abnormal relation to the sacrum. Subsequently she became eminently hysterical, and even maniacal, and I was compelled to remove her from the ward. From this state she recovered; her condition gradually improved, and she left the hospital relieved from her symptoms, both local and constitutional.

My experience of the past year in reference to dislocation at and below the ankle-joint (which students yet recognise under the curious term, "dislocation of the *tibia*," and occa-

sionally of the *leg*) confirms my former opinion that the foot may be dislocated *in any degree* and in any direction; but more especially does this remark apply to dislocation of the foot, both backwards and forwards.

Lithotrity.

Some cases of lithotrity that have fallen under my observation are not without interest.

A man, aged sixty-eight, admitted in November last, had suffered from symptoms of stone for three years, during which he had passed about one hundred small stones, varying in size from that of a large shot to that of a pea. I broke the stone by eight several operations, each of which was unproductive of serious pain, and was followed by more or less relief. A small fragment only remained in the bladder. After the last operation, which was not characterized by any remarkable feature, he had rigors, vesical pain, and low fever, and he died. The post-mortem examination revealed disease of long standing in both kidneys.

A boy, aged fifteen, admitted in October, had had symptoms of stone for two years. I crushed the calculus, which I presumed to be about the size of a large almond, twice only, at an interval of ten days. The boy left the hospital well.

A boy aged ten, admitted in January, had suffered from symptoms of stone for three years, during which he is reported to have had several attacks of retention of urine. His urethra being large, and readily dilitable, I decided on treatment by lithotrity, and for which I had a small lithorite made. The stone was crushed twice, without pain. On the following morning a fragment of stone became impacted in the urethra, and retention supervened. No alternative remained but lithotomy. As I was unable to pass in the bladder, I cut down on the urethra without it; and, having removed two large fragments of stone from the canal, I opened the bladder by the aid of a staff, and expelled the residue of the calculus by injection. More than half the stone had lodged in the urethra. The boy recovered. I freely confess the attempt to remove a stone from the bladder of a boy ten years of age by lithotrity to have been an error in judgment. The first fragment that escaped was of considerable size, and at once blocked up the canal. The rule I have consequently adopted for my own guidance is, never to operate with the lithotrite unless the urethra will admit a catheter of the size of No. 9 or 10. In this patient's case the lithotrite was No. 6, though the urethra was dilatable to about No. 7, or perhaps 8.

A man, aged seventy-two, was admitted in May, from whom I had removed a stone by lithotrity, in 1851. The peculiarities of this case were connected with the physical qualities of the stone itself, from which arose a very protracted term of treatment. I operated on him no less than seventeen times. The calculus was of lithic acid composition: and I may remark, after some considerable experience of the operation of lithotrity, that the hardest calculi I had ever broken have consisted of lithic acid, and not of oxalate of lime. I never once *crushed* this patient's stone; I only broke it into small fragments. No part of it was ever reduced to powder, as in other examples; but the entire stone, when finally collected, consisted of a multitude of fragments of nearly equal magnitude—about that of a large shot. The force of the screw required to break the stone continued very great up to nearly the last operation. On several occasions I came to apparently a dead-lock, and it required all the power at my command to screw the instrument home. Notwithstanding this force, at the termination of the case the blades of the lithotrite did not indicate more than a very slight strain in the workmanship, so perfect is the material of which these instruments are constructed.

There are, in my opinion, comparatively few cases of calculus in which the operation of lithotrity is not available. It may be most efficiently performed by any person possessed of ordinary skill and knowledge, and I earnestly join in its advocacy by the greatest of our modern surgeons.

Burns.

In reference to the subject of burns, I have always been an advocate for the stimulating principle of treatment first suggested by Dr. Kentish. That principle, to my observation apparently so sound, has been repudiated of late years by many eminent surgeons. The thoroughly negative action of Carron oil and lime water has been substituted for it, from which, I confess, I have never seen a corresponding benefit obtained. It is notorious that the intense pain caused by a drop of hot sealing-wax, or other similar agent, on the skin is much mitigated by the temporary application of great heat. The pain subsides in the course of a few moments by holding the affected part to the fire. The explanation is not perhaps very obvious, but the fact remain.

In July last five men were admitted into St. Bartholomew's Hospital, with severe burns on the face, head, chest and arms.

One died immediately after his arrival. My house surgeon, Mr. Richard Smith, was at the time ill, and the immediate charge of the cases devolved on a colleague, who applied the oil and lime water to the arms and hands of each of the surviving men. At that moment Mr. Smith arrived, and completed the dressing by the application of a solution of nitrate of silver (ten or twelve grains to the ounce of water) to the face, neck, etc. I did not see these men until the following morning, when all four complained of severe burning pain in the arms and hands, but stated they were free from pain in the other affected parts. The stimulating solution above mentioned was applied to the upper extremities, and the relief at the expiration of about a quarter of an hour was complete. In two of the cases some pain returned on the third day, and relief was obtained by the same means. My directions are simply these: In the case of infants or young children, wash the affected surface, if not very extensive, with a solution of nitrate of silver, in strength six or eight grains to the ounce, and immediately cover up the part with a thick mass of cotton wool; in the case of an adult, from twelve to fifteen grains, unless the surface requiring the application be very large. Should pain return, the solution may be advantageously resorted to at an early stage of the treatment.

Varix.

Some twenty-five cases of varicose veins of the leg have been treated in all my wards, and all by the application of the Vienna paste, composed of two-fifths potassa fusa, and three-fifths quick lime. The results have not shaken my confidence in the efficacy of the treatment. The eschars can scarcely be made too small, provided the material of which it is composed be thoroughly good and recently mixed. The numbers vary according to the extent of the disease. From twelve to eighteen will suffice usually for a limb somewhat largely affected. As regards the period of time required for the after treatment, it is of course of no great moment whether the number of the eschars be five or twenty-five, as they all progress towards recovery at the same time. I have never yet seen any evil consequence, either local or constitutional, arise from the application of Vienna paste to the largest and most prominent vein, however thin may be the textures over it. The cure is generally, but not invariably, permanent.

Housemaid's Bursæ.

I have purposely admitted a large number of cases of what

are termed "housemaid's bursæ," and they may be supposed to have presented themselves in every varity of form, character and stage of progress. I am not sanguine enough to entertain the hope of shaking the confidence of many surgeons in the efficacy of blisters and tincture of iodine, which may be applied and reapplied for months without the smallest impression on the disease, so far as I have witnessed their effects. Indeed, with respect to the latter agent, I regret to say that I know of no chemical or therapeutical agent in such general resort as a local remedy in disease which is so commonly inoperative for good; and in these bursal diseases it appears to me to be especially so. If a full-sized thread be passed through the centre of the swelling, be it large and hard, giving the sensation of a solid mass, but in the centre of which is always found a small cavity of fissure; or be it soft, and containing fluid, whether large or small, suppuration in the course of from two to five or six days will inevitably follow. The thread may then be removed. The disease is converted into an abscess, and may be treated as an abscess. I may assert, without exaggeration, that I have cured from one hundred to two hundred cases on this simple principle. No other caution is necessary beyond the removal of the thread when the orifices through which it has passed indicate the inflammatory action incidental to its presence.

The same agent, and on the same principle, is equally applicable to *ranula*. Indeed it is quite remarkable with what rapidity this disease recedes under the action of the thread, whether the cyst be of average or of the largest size. Of the latter I have reported some, and treated several of such magnitude as to require the lower end of the thread to be brought out in the neck at some distance below the base of the jaw.

Hæmaturia.

I have treated during the last year several cases of hæmaturia from malignant disease of the bladder. As a rule, I do think serious hæmorrhage from the organ to be a striking, and certainly not a permanent, feature of the disease. The early stage is marked by local pain arising from the cavity of the bladder, and frequent micturition. As the disease advances, dull pains are referred to the sacrum and posterior aspect of the pelvis. The introduction of a catheter, however carefully performed, is attended with more than the ordinary pain incidental to the operation, and is often very severe. On turning the instrument in the bladder, it will be observed to

rotate more freely in one direction than in another, and its withdrawal is followed by bleeding, sometimes considerable, but often continuing or recurring at short intervals, for a day or night, or longer. Pain is caused by pressure on the hypogastrium, and through the rectum, but not on the perieneum, as is incidental to active disease of the prostrate. In some cases, however, the hæmorrhage is frequent and in large quantity, being either entirely mixed with the urine, or partially deposited in a clot at the bottom of the vessel. The bleeding will often cease for many days, or even weeks, and the pain becomes less considerable. Loss of appetite, impaired sleep, and emaciation follow, and inevitable death.

A man, aged thirty-nine, was admitted in November last, discharging blood mixed with his urine in large quantity. He had been the subject of disease for six months; had pain on pressure over the bladder; frequent micturition, but rarely without blood. He had no symptoms of renal disease. The introduction of the catheter gave great pain on reaching the organ, which, unlike ordinary catheterism, continued long after the withdrawal of the instrument. Occasionally the hæmorrhage would cease for many days, and the pain partially, and both would again recur without cause apparent to observation. He appeared for a time to be relieved by gallic acid and opium; but I really cannot say his occasional improvement was positively attributable to the treatment. He left the hospital in a weakly condition, and I shortly heard of his death, but his bladder was not examined.

A man, aged fifty, was admitted in November, with dull, aching pain in the bladder, and frequent micturition, from which he had suffered three or four months. On introducing a catheter, No. 6, very cautiously into his bladder, he expressed great suffering. The instrument did not move freely in the organ, and exhibited a tendency to fall over the right side. Blood escaped along the canal before the instrument was withdrawn; although no effort had been made in the introduction. Pain followed the use of the catheter, and continued for many hours. It was only arrested by an opium suppository. But the bleeding continued till the night of the day following. There was no evidence of stone. The hæmorrhage returned in a week, and continued in spite of astringents and opium for several days; but the pain was unremitting. In two months from this date he died. The left side of his bladder was occupied by a large growth of soft cancer.

I now leave the wards of St. Bartholomew's Hospital with

a view to state the particulars of the case of a well known member of our profession, who died last winter. He was at the time I allude to (October last) under the care of an eminent physician, for pain referred to the descending colon, which he himself attributed to distension of the intestine; but he had also suffered for many months from frequent micturition and heat along the track of the urethra. I was requested to see him in reference to the subject of stone. I could not myself refer his symptoms to this cause; but as it was most desirable, in regard to his future treatment, that this question should be set at rest, I examined him. The introduction of No. 6 catheter, passed with the greatest care, was attended by very severe pain, extending along the lower part of the canal, but greatly aggravated when the instrument reached the prostrate gland. Here the instrument labored, as it were, as though the canal were either contracted in calibre, or distorted from the straight line. Immediately the catheter entered the bladder, the point was carried over to the right side, nor could it be held straight with the mesial line. Blood followed the withdrawal of the instrument, and slight bleeding continued for three days. About ten days afterwards I was sent for very urgently, and I found Dr. ——— in the water-closet, greatly alarmed, fearing to move. He told me he had had an attack of pain, of the severest endurable character, commencing in the left testicle, and extending along the cord to the bladder, where it continued with an intensity compared with which all he had previously suffered was trifling. A glass of strong brandy and water and an opium suppository completed the relief which had commenced before my arrival. Up to this date, therefore, the evidence stands thus: 1. Frequency of micturition for about three months. 2. Great pain on the introduction of a catheter, and difficulty of passing it through the prostate gland. 3. The instrument carried over to the right side of the bladder. 4. Hæmorrhage continuing for three days. 5. Sudden attack of intense pain in the testicle, cord and bladder. 6. The existence of cancerous disease in the person of a near relative. Diagnosis: Cancerous tumour of the left side of the bladder, involving the prostrate gland. No attempt was made to confirm this opinion by any repetition of the local examination. Dr. ——— lived about two months. The post-mortem examination revealed the presence of a large firm cancerous growth, of the size of the fist, occupying the left side of the bladder, which was pushed over to the right side, and involving the prostate gland,

through which the urethra was much curved to the right side, and contracted in diameter.

Wounds into Joints.

A few words on the subject of wound into joints. A boy, aged twelve, was admitted in July last, with a small wound on the inner side of his knee-joint. It was difficult to ascertain with accuracy the time or the nature of the cause, which, however, had occurred several days prior to his admission. Some four or five days afterwards, Mr. Smith abstracted a pin from the wound, which had obviously penetrated the joint, from which synovial fluid now escaped for several days. The fluid became purulent and copious; the joint hot, swollen and extremely painful. Matter collected under the skin in the neighborhood of the original wound, which required a second puncture. Large flabby granulations, almost invariably accompanying wounds into joints, formed around the two orifices, and existed for a month. The granulations at length subsided, the wounds healed, and the joint regained its normal size and appearance. Can this boy recover the former mobility of the joint, or is anchylosis inevitable? I believe it quite possible that the functions of the joint may be restored. I have had two cases of wounds into the knee-joint, in which discharge of synovia in many days' duration was followed by the free escape of pus from the cavity of the joint, continuing for a fortnight in one case, and ten days in the other; and in both cases the joint entirely recovered its functions. Of the restoration of the joint in the above case, however, I am not sanguine, from the protracted nature of the disease, the progress of which occupied a term of many weeks. The subject has not been investigated, as far as I know, but it is not devoid of surgical interest.

Breaking-down of the Joints.

On the subject of breaking-down of joints fixed by deposit around them from rheumatic inflammation, I fear I have been less successful in my treatment than other members of the profession, judging from the published record of cases. But of the half dozen that have unfortunately fallen under my charge, in not one have I succeeded in restoring the functions of the joint, all having returned to their previous state of "spurious anchylosis."

Foreign Body in Pharynx.

In June last I was summoned to a curious accident. A

young woman was admitted, wearing a set of artificial teeth, consisting, if I recollect right, (for I quote from memory) of four connected by a plate of metal, from each extremity of which descended hooked processes to fix it on the gum. The plate became detached, and she swallowed it, and it fixed across the pharynx about an inch from its termination in the œsophagus. The accident occurred in South Wales; and, having made one unsuccessful attempt to remove the foreign body, the medical attendant brought her to London. The accident had happened twenty hours when I saw her. The woman was in much distress, not from obstruction in the pharynx merely, but also from pressure on the larynx. The finger, passed with a considerable effort, reached the object, but only touched it with difficulty. From Fergusson's ample collection of forceps, of every form, size and variety, I succeeded in selecting a pair. After two or three futile efforts, having fairly grasped the foreign body, I abstracted it, not without the application of great force, so tightly was it held by the pharyngeal muscles. I do not pretend to any skill in the accomplishment of this not very difficult task, which owes its success to the advantage afforded by an hospital in selecting out of a large number the appropriate instrument for the purpose required. I kept the woman in the hospital till the following day, during which interval she exhibited no bad symptoms, beyond slight bleeding and soreness in taking food.

Hysteria.

In concluding this somewhat lengthened communication, let me direct the especial attention of the younger members of the surgical profession to one of the most remarkable features associated with the treatment of disease. I allude to the great prevalence of *hysteria* in the cases of young women. It is quite remarkable how general is its presence, and how frequently it is interwoven with the symptoms of real disease. Abundance of cases recur to my recollection during the past year; reputed affections of the spine, and of the knee-joint more especially, at first sight of the most deceptive character. I would go so far as to assert that its presence, in some degree or other, is almost universal. And yet how critically important is a correct diagnosis in such examples! What form of treatment has a greater tendency to aggravate the symptoms of hysteria than that which may be judiciously applied to the cure of real disease?—*London Lancet.*

ORIGINAL COMMUNICATIONS.

VALEDICTORY

TO THE GRADUATES OF RUSH MEDICAL COLLEGE.—FEB. 5TH, 1862.

By J. W. FREER, M. D.,
Professor of Physiology and Surgical Anatomy.

GENTLEMEN GRADUATES:

In entering upon the duties of the profession to which you have this day been admitted, it is worth while to ponder them well.

These duties are of a fourfold character—to yourselves as members of a liberal profession, to your patients, to your colleagues, and to the public.

It is trite but necessary to say, that your education has really but just begun. You have been instructed how to observe, what to observe, and how to learn. Your full education is to be the fruit of a lifetime of industry.

The graduate of medicine who goes forth imbued with a spirit of self-sufficiency, deprives himself of that which to the scientific man is the very means of growth and advancement. He fancies himself already fully armed and equipped for any emergency; therefore, what need hath he to rack his *brain* for the purpose of developing new scientific truths? A man of this description, like an automaton, is confined in his performances within the narrow limits prescribed by the artificer. We sincerely hope that there are none such in our present class of graduates, for, Gentlemen, whatever may be your diligence or attainments,—your future honor or eminence,—the time will never arrive when you can rest on your arms and declare the scientific world conquered. There are no weeping Alexanders in the scientific domain.

We doubt not but that, during your pupilage, you have been diligent and careful students. You have unquestionably improved your time in investigating the various sciences pertaining to our profession; but with all the opportunities you have enjoyed, you have but placed yourselves on the threshhold of the temple of medical science—have seen but the passing panorama, vivid though it may have been, yet like it but a fleeting picture. You have perused the traveler's guide book,—have scanned the maps and charts of that vast domain bounded by the *unknown*, and are simply ready to set forth on a journey of observation, verification and discovery. If observant, you will find in your wanderings whole continents of unexplored regions — regions as trackless as the great Sahara.

Wherever your lot may be cast, whether in country, village, or city, you must not expect at once to enter upon a large practice. Leisure, more or less, you will undoubtedly have, and it is this leisure which, according to the use you put it to, will make or mar your future. This leisure should be improved in continuing your studies, taking care to be thoroughly informed in regard to all improvements as promulgated in the various standard medical periodicals.

You will also find ample food for reflection in conning over the various text books. I would also advise you to keep a common-place book in which to note down, at the time, any thing of value or interest.

Now is the time to practice observations with the microscope, an instrument indispensable to the scientific physician, and which, thanks to the optician, can at the present day be secured at trifling cost. You have seen in the progress of the course its immense range of application. By it you can determine the normal structures, and recognize the abnormal—you can see changes in the fluids and solids. The knowledge it will thus give you is inestimable, and beyond it you can apply it every day to detect the character of the medicines you employ, and thus foil both ignorance and fraud.

Supply yourselves also with the more useful chemical reagents, a spirit lamp, a retort and test tubes, and familiarize yourselves with those analyses and tests which, in connection with microscopic observation, have at this day gone far towards establishing both diagnosis and therapeutics as exact sciences. The strong point of the charlatan and quack is in social chicanery and blaring demonstrations of what he has done and can do; the strength of the educated medical man is in his knowledge, gathered by such assistants as these—interrogating nature and demanding possession of its arcana. There is more real power in the microscope and the test tube than in the whole army of empirics, from the first quack who said: "Ye shall not surely die," to the last and meanest follower of Hahneman, who repeats to his deluded dupes a similar promise.

Be not content with mediocrity, but fix your standard high. It is hard work which yields great results. Here and there a man stumbles upon fortune and fame; but industry and perseverance are the only safe guarantors of success. The truly great men in our profession have only become such by toil and unflinching effort; and it is by these only that they have left their impress on the ages in which they lived and sent their names down to posterity with ever increasing honor.

The status of an intelligent physician is such as to involve great responsibility in his relations with the community in which he resides. He is looked upon as the leader of public opinion in all matters pertaining to health or sanitary regulation, and on all kindred subjects his judgment and advice have great weight and influence, and justly so, for it is taken for granted that on these subjects his studies and observations have fitted him to give enlightened opinions. See to it, gentlemen, that you are fully up to the demands made upon you in these respects.

Suffer me to call your attention to other subjects which, though of minor importance in themselves, yet have great influence on your future welfare. In the first place, I would recommend the cultivation of quiet and gentlemanly manners;

make yourselves informed in regard to the usages and customs of refined society, and that can only be attained by seeking such for your association, bearing in mind that even the most degraded and ignorant, instructively respect and admire a well-bred gentlemen. I will beg leave to add, that I do not adopt as worthy patterns, the Beau Brommel or Lord Chesterfield style of gentleman,—those polished icicles, all glare and glitter; but the man who, in respecting himself, has a proper respect for the feelings of others.

We now come to speak of the responsible relations existing between yourselves and your future patients: a responsibility greater than any other existing between man and man. Life is the priceless jewel. "What will not man give for his life?" All things earthly kick the beam when weighed in the balance. We must recollect, gentlemen, that we have to deal with what both human and divine laws regard as sacred; a gift of the Creator, which none can blot out or wantonly injure without incurring the weightiest criminality. But suppose that life be lost through neglect or indifference—ignorance of matters connected with mere practical details—think you we shall stand acquitted either at the bar of conscience or of God? It is indeed a solemn thought, even to those who faithfully cultivate and employ the talents with which they have been endowed, that through their deficiencies of knowledge, or of skill, which, with greater diligence, they might have acquired, some valuable life may have been lost to society and the world.

There is, indeed, no calling, save that of the sacred *ministry*, in which the claims of duty and the responsibilities attending its discharge are so weighty and stringent as in ours; claims which cannot be wholly shrouded in forgetfulness or eluded by sophistry.

We may and must frequently err, for human judgment is at best but fallible. But then, if we improve to the utmost the advantages within our reach, if we consecrate our best energies, to the relief of the sick, we shall have at least the

consolation of feeling that human lives have never been lost through indifference, indolence or neglect of ours. And here, as in all other cases, we find that interest coincides with duty, and that those who are wholly devoted to the study and cultivation of their art, and who consecrate their entire energies to their profession, are the very men who attain to the greatest eminence, and who are most amply rewarded with the smiles of fortune.

In the words of an eloquent writer, "You are destined to witness many scenes calculated to touch the deepest and most delicately strung cords of human feeling. Feelings of solemnity and awe naturally associate themselves with scenes of suffering and death. Sobs of agony, and sighs of anguish bursting from broken hearts, fair hopes and confiding affections scattered to the winds by the freezing breath of the destroyer, are among the melancholy associations that extend themselves in sombre perspective along the physician's path."

When pestilence is busy in the work of destruction and the love of gain gives place to the love of life, when all that possess the means of flight hurry from the fatal spot, when victims are swept by hundreds into the graves, is it the paltry consideration of fee, think you, that chains the physician to his post? He moves like a ministering angel where the hot breath of contagion wafts poison on its wings, and calmly and fearlessly perils himself to smooth the pillow of a dying wretch, or to administer balm to those who suffer the double burden of poverty and disease. Although he well knows the danger to be silent, insidious and deadly, there is no cowardly shrinking of his heart, no fear of self, but true to the sublime philosophy which he professes, he is ready to yield his life as a pledge of the sincerity of his faith.

You are bound by every moral and sacred obligation to devote your best faculties and energies to your profession. You are to regard human life in every circumstance, in all conditions and aspects, as sacred. You are to bestow the same assiduous attention upon the poor as the rich; the

vicious and depraved as the virtuous and good. You are to remember that guilt equally attaches where life is lost, which you might have saved, as if you had been actively and intentionally instrumental in bringing about the same fatal result. You are to do nothing to lessen the confidence that is reposed in you as physicians, or as men; nothing to bring your morals or integrity in question. You are to be kind and gentle in all your deportment towards the sick; ever calm and circumspect, sympathizing and cordial; avoiding all eccentricities in manners or opinions; affable without meanness; grave without formality; cheerful without levity; never violating the seal of confidence in relation to professional or family matters which may come to your knowledge. You are not to offend the most delicate sensibilities, either by carelessness of manner or indelicacy of speech. You will cheer the desponding, and comfort the dejected, and sustain the hopes of the despairing. Knowing how conducive the sufferings of disease are to salutary reform, you will endeavor, on every fit occasion, to bring back to virtue, as well as to health, those who are sunk in ignorance, misery and crime. You are not expected to usurp the office of the sacred priesthood, but are expected to be inspired with the purest philanthropy, with a tender sympathy, a devoted charity; for these are the bright perennial fountain whence disinterested labors and sacrifices are to flow. You will by turns speak the language of science and morality; ever cheerful and hopeful in the presence of the sick; never relaxing your attentions because the case has become apparently hopeless, for this is the very time when these attentions will be most needed—remembering that it is equally your duty to prolong life, and mitigate pain and suffering, as to cure disease. Never abandon hope even in cases usually considered hopeless; for, as Hufeland well observes, hope generates ideas, elevates the mind to new views, and new endeavors, and even renders impossibility possible. He who has given up hope has given up reflection, to which apathy and paralysis of the mind follow, and the sick must

invariably die, because he who has been called to his assistance is already dead.

Even in the stage of dying the physician should not forsake the sick, for even then he may become a benefactor, and if he cannot save, may at least relieve departing life.

Next, I would advert to the duties you owe to your professional brethren. We have, as most of you are probably aware, a code of Medical Ethics, established by the National Medical Association, which is most excellent, and you will find it profitable to carefully peruse it. But to him who would always do right and be right, I know of no better *rule* than the golden one: "Do unto others as you would they should do unto you." One great and prominent reason of the somewhat low estimation in which the profession is held by some persons, is due mainly to the bickerings, envying, and bitter jealousies of many practitioners towards each other. This should by all means be avoided. A physician who is perpetually engaged in disparaging his professional brother, even though he may fancy a just cause, induces a habit of mind that reacts with ten-fold force upon himself; it sours his temper, warps his judgment, and causes him to view everything as distorted by his own distempered imagination. The true physician is never actuated by such a spirit. On the contrary, he is a man of enlarged and comprehensive views—a cosmopolitan, in the complete sense of the word—overlooking the prejudices of all with whom he may be brought in contact in his profession; rendering efficient aid to Jew or Gentile, Infidel or Christian; at home, if duty calls him there, in the lowest haunts of vice, or the most refined and virtuous society.

Your relations with your professional brethren as consulting physicians or surgeons, is a position of exceeding delicacy. On such occasions, oftener than any other, it is, that injustice is perpetrated against a professional neighbor, and oftentimes the perpetrator executes his nefarious designs so artfully and insidiously—as by signs, manner or gesticulation—that you

will be at a loss for a basis on which to found a charge of dishonesty or unfairness.

When people demand a consultation, you may rest assured that they have lost more or less of faith in your skill and ability as practitioners of medicine. Already they or their friends have in their mind's eye one whom they consider as the embodiment of profounder wisdom and greater professional capacity than their regular and faithful medical attendant. And on the other hand, where the attending physician deems it necessary to ask professional advice, people deem it a tacit acknowledgement of superiority of skill and capacity on the part of the gentleman whom you may have selected for your advisor. This being the usual condition of feeling under such circumstances, we sincerely hope that no member of this graduating class will ever seize upon this vantage ground against his professional brother, under any pretext.

On the contrary, a consulting physician, if he be a gentleman, will behave on all such occasions with great modesty and reserve, uniformly addressing his remarks to the attending physician, rather than to the family or patient—considering himself as guest and advisor of his professional confrere, rather than of the family or surrounding persons.

It is the height of injustice towards the attending physician, to answer questions such as are usually propounded by friends and patient in regard to the nature of the disease or the correctness of the previous treatment. To refuse, under such circumstances, is not rudeness; on the other hand, to answer them is the depth of meanness and unfairness. Reserve all your professional opinions for the private and confidential conversation between yourselves. If, by mutual agreement, it is determined to change the course of treatment, in justice to your professional friend, do not change it immediately, if it can be avoided with safety to the patient, for such a course will be deemed as evidence that the consulting physician has disapproved of the former management of the case. By pursuing the above course, while you may not supplant your pro-

fessional neighbor, you will most assuredly secure his friendship and respect for all time to come, as well as the admiration of those who have witnessed your gentlemanly and modest bearing.

Under this head, I would also add that the undiscerning public quite as frequently withdraw their faith from the intelligent and honorable physician, to repose it in the brawling and ignorant charlatan—as with your acknowledged peer.

Your jealous care for the honor of the noble science which you have espoused, as well as your own self-respect, will forever debar you from professional contact with such excrescences of the *ars medendi*.

In a word, your are to scrupulously avoid, at all times and on all occasions, any and all disreputable professional associations; but grapple to your breasts, with hooks of steel, every upright, intelligent and high-minded physician—for in union there is strength. And alas! it is for want of this union—particularly in our own country—that our noble and beneficent calling has been measurably shorn of its sacredness—has been drabbled and draggled in the dust by every aspiring knave—until (I blush to say it) the public have come to look upon pretension as the measure of qualification, and a gaudy tin sign, with staring hieroglyphics, as equal to a diploma from the most renowned institution of the world! Look to it, then, that you guard sacredly the honor and interests of your acknowledged professional brethren, for in doing thus, you will compel public respect, by convincing them that we are not a band of wranglers, but on the contrary harmoniously engaged in the completer development of principles embracing in their scope the highest temporal interests of the human race.

Next; in regard to your relations and responsibilities with the public at large, as separated from your duties and liabilities toward your patients, and you cannot accomplish the great ends of your mission if you leave these duties unperformed.

Ours is the only science which regards the entire man. The divine regards him in a religious and moral aspect, as a responsible being, endowed with reason, conscience and will, and his mission is confined to the control and direction of these faculties. The legal fraternity look upon a man simply in his social capacity, endowed with certain political and civil rights, and owing to society, of which he forms a component part, the performance of certain duties, and the refraining from certain acts, which might infringe upon the rights and interests of others. He looks upon him, especially, as the possessor of goods and chattels, who is bound to regard as sacred the laws of *meum* and *tuum*, under the pains and penalties of sundry acts, laws and statutes, made and provided to meet all cases aforesaid.

But the medical man takes a still wider range—a more comprehensive survey; he commences by learning the physical structure of man; he marks the evidences of design; investigates the functions of the various parts of this wonderful microcosm; he penetrates far beyond those mechanical and chemical principles and laws, which he finds everywhere exhibited in the human structure; explores the nature of those vital properties, the mysterious attributes of life as displayed in living matter; he even goes beyond and above all this, and studies man as an intellectual being, endowed with rare capacities, thought and reason; subjecting the very laws of the universe, and subtlest agents of nature to the control of his will; he even seeks to know the nature of those ties, and the mode of that union, which connects this human soul with the elements of brute matter; how it depends for its development and its healthy exercise on certain conditions of that noble organ—the very throne of intellect—the brain; how when that organ is the seat of derangement and disease, reason totters, and that intellect, which once shone as a meteor, now lies in splendid ruins—reminding us of a Grecian temple of classic beauty, shattered by an earthquake shock or the more ruthless hand of time. He stops not here. He

examines all causes, physical or otherwise, that may serve to warp or disarrange his moral or intellectual faculties; he studies man as a being possessed of the highest attributes, of a sense of accountability to a higher Power, and he finds that his religious nature, as well as conscience itself, are subject to physical agencies and corporeal organization.

Trace the true physician to the bed-side of the sick; observe his ministrations to the poor sufferer whose disease is but the legitimate result of unbridled passion and indulgence; the prophylaxis he prescribes is the return to a virtuous life—the abandonment of habits which are sure to prove fatal sooner or later. It is not transcending the limits of his science or his art when he rises to the source of the malady for which he prescribes, and strikes at the very root of the evil, giving a wise caution and a solemn warning, which fall upon the ear with irresistable force, establishing with incontrovertible proof that our profession embraces in its comprehensive scope, the entire man, physical, intellectual and moral.

To the thinking mind it is a marvel that the medical profession, thus comprehensive in scope, and yet so closely interwoven with both public and private interests, upon which such tremendous responsibilities are imposed and such requirements made, nevertheless does not receive that high place in social estimation which it certainly ought to be awarded--nay, more, that its very respectability is contested by parties, either ignorant or depraved, who would drag it down to their own low level, with scarcely a note of remonstrance from the popular voice.

The greatest injustice our profession receives from the public is in being associated with the chameleon-colored hordes of Quackery, and in their gravely discussing whether it is little better than they, not appreciating that between them and us there is a great gulf fixed, wide as that which separated Dives from Abraham. It is noticeable that, like Dives of olden time, they are ever anxious to assert that they also are worthy of being clasped to Abraham's bosom.

It is needless to repeat the fact, obvious to all familiar with the progress of the sciences, whose elucidation is the glory of our age, that no other class of men has a record on their pages of honor equal to the medical profession. We point to the roll of names linked to immortal fame because of their daily contributions to the knowledge which is lifting this age so high above all the centuries of the past, and challenge the production of a like number from any other class; and, we remember that, as Blackstone said, our "profession hath deserved more than any other for general and comprehensive knowledge," and then wonder why it is that any portion of an intelligent community should permit mere sciolists, pretenders and knaves even the semblance of social equality with it.

Gross injustice is done the profession by violation of the first rule of common sense, viz: that those skilled in any art or science are the ones in whom to confide in all questions pertaining to that art or science. In business affairs every man is forced to regard this; it is a rule even in courts of justice. Why should it not be in the great court of public opinion?

But we sometimes hear, "who shall decide when doctors differ?" The reply is obvious, if the disagreement be between true physicians, recognized as such by the great body of educated medical men, it can only be decided as all mooted points in other arts and sciences are decided, by full inquiry, discussion and investigation by experts, certainly not by those totally ignorant of the matter.

What would be thought if honorable judges, differing on some occult point of *law*, should call in the door-keeper of the court to decide; or, if Doctors of Divinity should ask the Hottentot Pagan to solve their knotty arguments?

This, at least, is common sense. The man of education and culture, and the class to which he belongs should receive the confidence and respect of the public, to the total exclusion of that man and that class wholly devoid of these obvious qualifications.

So far as our profession and the various phases of Quackery —Hydropathy, Thomsonism, Homœopathy, &c., &c.,—are concerned, there can, in a strictly scientific point of view, be no room for question; it stands upon the strong foundation of true science.

A singular misapprehension exists in a portion of the public mind in regard to the true character of medicine as a science. Some suppose it to be a system of guesswork, or at best a more or less shrewd and adroit adaptation of means to ends without the guidance of fixed and established principles; that there may be varying systems, better or worse as the case may be, and it is of little import which is adopted, but this is a gross logical error. Science is classified knowledge, facts reduced to series and their relations made known, and there can be but one which is real and true; there can no more be two sciences of medicine than two sciences of logic, of chemistry, or of natural history. Science is kingly and brooks no rival near its throne.

The science of medicine, Gentlemen, as we, your temporary instructors, have attempted to impress upon you, is a catholic system; it embraces all the facts of man's structure, organization, the phenomena of life and all, whether material or immaterial, which influences it in health or disease. The true physician is lord of this whole manor, and it is his province to control all influences to the preservation and prolongation of life. He it is who has discovered the truths which have so wonderfully increased the duration of human life during the historical period. He it is who rests solely on scientific truths, discovered by precisely the same methods employed in other sciences, and applied under precisely the same processes of reasoning which guide all arts founded upon science. Our science is not exclusive, save as truth must ever exclude error; it is not restrictive, save as fact must ever prevent the incursion of falsehood. Its principles, like other great truths of nature, "cannot be caged in the narrow confines of a rhetorical sentence."

The term Allopathic, as characterizing our profession, should be repelled. It is but a nickname, and no scientific medical man can accept it. He should accept of no other appellation save the time-honored and expressive term *Physician.*

Let medical delusionists claim that their schemes are exhaustive, that they have discovered the fundamental laws of disease, and consequently specific, that is unmistakable and infallible methods of cure. The humble scholar whilst, like Newton, compelling the admiration of the world at the grandeur of the truths he has developed, still feels that he has but collected here and there pebbles from the shore of the great ocean of knowledge.

A similar delusion in former times, with similar beauty of simplicity, referred all forms of matter to four elements—earth, air, fire, and water.

All things in this sublunary sphere are subject to disturbances of the great law of order; all living things are subject to disease, from the tiniest moss to the gigantic oak; from the monad to the elephant, and all the living creations of the human intellect in like manner are now and then infested by ignoble vices, begotten by the demon of disorder. Religion itself has its Mormonism and Free-love; politics has its anarchists and its rebels; law has its burglars, its thieves and its murderers. Why should medicine expect an isolated fate, and thus escape its hydropathists, its steam doctors, its Indian doctors, its mesmerists and homœopaths?

It would be just as good sense to cut down the plum tree because it is infested with the curculio, as to ignore rational medicine because empirics fatten upon the result of the stings they inflict. Do not cut down the tree, but destroy the vermin with caustic, or shake them off and trample them in the dust.

Follies and absurdities seem wonderfully out of place in such close juxtaposition with true knowledge, but thus it has been ever since man first began to learn. The vermin never

know their place, and will fasten upon the noblest of things; a fact which did not escape the acute perception of the Scottish poet, when attracted by the incongruous position of the "crowlin ferlie" on the lady's bonnet in church, and we are tempt to exclaim with him:

"Ha! whare ye gaun, ye crowlin ferlie!
Your impudence protects you sairly;
I canna say but ye strunt rarely
Owre gauze and lace.
Tho' faith, I fear ye dine but sparely
On sic a place.

"Ye ugly, creepin, blastit wonner,
Detested, shunn'd by saunt and sinner,
How dare ye set your fit upon her,
Sae, fine a lady?
Gae somewhere else, and seek your dinner
On some poor body.

"My sooth! right bauld ye set your nose out,
As plump and gray as onie grozet;
O for some rank mercurial rozet,
Or fell red smeddum,
I'd gie you sic a hearty doze o't
Wad dress your droddum."

The quack, whatever patronymic he baptizes himself with, and almost always his adherent, can be told at a glance; he wears it in his face, his gestures and his attitudes, and if by assiduous caution he deceive in these, "his speech ever bewrayeth him." His are not catholic views. Knave and dupe are upper and under sides of the same coin, with base metal always between. Even if he believes in his own imposture, his credulity will always have the element of knavery in it; or, if he believes it not, his knavery will always wear the motley—the cap and the bells.

If you really know your profession, you must respect it, love it, and seek to honor it. Hence you must sustain its true character and dignity before the public. You cannot compromise the matter—you cannot shirk the responsibility—you cannot give place to the evil, but must rebuke it. It is your duty to enlighten the community in which you live. You have no right to allow them to be duped by designing knaves, or

fall the easy victims of low delusion. The community have a right to this service from you, and you are false to the profession, to yourselves, and to your fellow-men, if, seeing the evil, you do not speak the timely word of caution, or the sharper one of denunciation.

You should no more, as honorable men, pander to the vices of the human mind, than to the vices of the human body. The evil is a grave one, and, like Sabbath breaking, profanity, gambling, and some nameless crimes of a darker hue, the moral sense of the community seems to have become obtuse to it by the very multitude of its exhibitions.

The charge is frequently made that medicine, as a science, has been undergoing constant mutations. If by this, it is intended that it is a progressive science, we admit it freely; it is the glory of the profession. But, if by this, it is intended that it has been a history of contradictions—we repel it as begotten either of calumny or ignorance. Methods of accomplishing results have varied and will continue to vary, as men and times, seasons and surroundings change.

The objects sought by Hippocrates, we still seek to-day, and will continue to seek during all coming time. Powers and Turner may and probably do adopt different methods of giving shape to their glowing ideals, from those adopted by Praxitteles and Apelles; but the same eternal principles vitalize all their creations. You may rest assured that were Hippocrates now living, he would be the disciple of no pathy or—ism—even to secure admission to the luxurious apartments of the hysterical or dyspeptic votaries of infinitesimal tittillations.

Gentlemen: allow me to allude to the record of our Alma Mater. It is now nineteen years since our venerated and distinguished colleague and President of this Institution, conceived the plan of a medical college in the city of Chicago. He received but little of encouragement—the project being considered impracticable, if not chimerical; but with characteristic energy and perseverence, he pushed boldly forward,

overriding all obstacles, until, from a graduating class of *one*, the number has gradually arisen to forty annually.

The nicest sense of propriety cannot be disturbed by a single allusion to another member of that first Faculty of the College, who has from that time shared all of its fortunes, and to whom it is largely indebted for the high position it has achieved. Whilst some were coldly doubtful in their support, and whilst other walks of professional life have attracted others, and whilst others still have sought to divide, distract, and destroy—he has ever lent his best energies, his unequaled social qualities, and his splendid attainments to the welfare and prosperity of this College. I would say more, but his personal presence forbids. Soon he starts for another field of duty, lending his large scientific and professional knowledge to the support of that National Government under whose benign auspices, not only this College, but all other worthy institutions of our common country, have prospered beyond any degree which history records. I but echo the sentiments of this class and my colleagues, when I bid him the fervent God-speed in the work before him, and breathe an earnest prayer for his safe return to us before our next annual session —"when grim-visaged war shall have smoothed its wrinkled front," and the arts of peace again replace the discordant sounds of civil commotion.

The alumni of this Institution already number something over seven hundred. In almost every nook and corner of the great West, you will find her toiling and earnest sons; and we say it with pride and satisfaction, that few have ever turned aside from her precepts. Many are occupying high positions in Medical Colleges, and a large number are rendering yeoman service in their professional capacity in the grand struggle for our national existence.

Allow me to say in conclusion, that you can scarcely estimate the amount of good that each of you may accomplish in the world, if actuated by proper motives; and in order to this, you must bring yourselves to feel your weighty responsibilities.

The Trustees and Faculty feel, in presenting you with these diplomas, that we are linked with your future—be that of an honorable or dishonorable character. While we have, from association, learned to have confidence in your honor and integrity, yet we would beg leave to give the parting warning—to do naught in the future that may bring discredit upon your Alma Mater. The true teacher ever feels a deep and peculiar interest in his pupils, and we, as having been your preceptors in the noble art of healing, will ever be ready to extend toward you the helping hand. Gentlemen, disappoint us not. Fulfill your destiny; carry out your purposes with a brave heart and manly courage.

"The world is all before you where to choose
Your place of work, and Providence your guide."

Farewell.

DE WITT COUNTY MEDICAL SOCIETY.

The Society met in Wapella on Tuesday, the 7th of January, 1862. The President called the Society to order at 10 o'clock A. M. The minutes of the previous meeting were read and approved. Society adjourned to meet at 2 P. M.

AFTERNOON SESSION.

Essays were called for. Dr. Shurtleff, the only essayist present, wished to be excused, on account of sickness.

Dr. Davis gave a verbal report of a case. Dr. Madden also gave a verbal report of a case. The cases reported elicited considerable discussion. Pneumonia, the subject for general discussion, was next called for. Dr. Wright opened the discussion by reading a paper on the diagnosis and treatment of Pneumonia. The discussion was continued until a late hour.

The following resolution was offered and adopted:

Resolved, That the thanks of the Society are due and are hereby tendered to Dr. Davis and lady, and Dr. Shurtleff for the excellent dinner gotten up for the Society.

Burns and scalds was the subject announced by the President for general discussion, at the next meeting of the Society. Drs. T. K. Edminston, W. W. Adams, B. K. Shurtleff and J. R. Richard, were continued as essayists. On motion, the proceedings of this meeting were ordered to be published in the *Central Transcript* and in the *Chicago Medical Journal.*

The Society then adjourned to meet in Clinton, the first Tuesday in April next. JOHN WRIGHT, *Sec. pro tem.*

EDITORIAL.

Apologetic.—The unusual pressure of other engagements must be our apology for the brevity of our editorial columns the present month. We have several valuable original communications on hand which were received too late for insertion in our present number. The important subjects treated in our selections will, we are confident, be fully appreciated by readers.

A Hint.—A contemporary complains that some of his neighbors have been making "cowardly insinuations." It is very much in the condition of the fellow who did not attend the party "because of a *hint* he received. "How was that?" inquired a sympathizing friend." "Because when I went to the door of the house, the master ordered the servants to kick me out—I accepted the *insinuation* and left."

Death Bed Repentance.—The gentlemen who seceded from Rush Medical College two or three years ago, expecting thereby to bring it to destruction, have become lachrymose, and, in the last number of their organ, adopt as their own the language of the almanac and exclaim: "The man who tries to build himself up by pulling others down, is like one who sits himself in a wheelbarrow, and tries to wheel himself to glory."

We endorse the idea, and suggest that it cannot be done, even though Mr. Sylvester Lind takes hold of the handles of the barrow.

Anonymous.—Some one, with a feminine chirography, sends us an advertising puff of Homœopathy, having the recent infinitesimal army appointments as a text, requesting us to insert it, "with comments." The advertisement is declined. We advertise to a limited extent to accommodate dealers in professional wares, and to aid in the support of our

periodical; but we insert no advertisements free, neither do we accept for any pay the advertisements of Lock Hospitals, Patent pills, Abortionists, Spiritualists, Hydropathists or Homœopathists, or anything of that ilk.

Homœopathists have been appointed in the army, but we are gratified in being able to state that thus far they have not been appointed as homœopathists. On their examination and their credentials, they have been exceedingly careful to hide their homœopathy. When asked how they would treat diseases, they have been very careful to answer in accordance with the principles of scientific medicine, and not in accordance with homœopathic teachings. In brief, their *status* in the grand army is precisely of the character of that of secessionists and other traitors who cloak their infamous principles in the garb of loyalty and patriotism.

If Homœopathy can glorify over this position of those of its disciples who have crept into the medical service of the Government, we congratulate them on their proficiency in the science of swindling and fraud, and cheerfully express the hope that it will speedily secure the time-honored reward of similar proficiency.

The chirography of our correspondent is suggestive of hysteria, and we cease to wonder at her belief. Or is it the production of a neuter? Reflection leaves us in a quandary, and we are obliged to leave the whole matter in Small hands.

Notes on the Surgery of the War in the Crimea, with Remarks on the Treatment of Gunshot Wounds. By George H. B. Macleod, M. D., F. R. C. S., &c. J. B. Lippincott & Co.; Philadelphia: 1862. *Pp.* 402.

This is a valuable and interesting treatise, and although perhaps especially intended for our military surgeons, nevertheless is worthy reading and a place in every physician's library. It is timely, written with great good sense, and shows a familiarity with practical details every day demanded of the military surgeon, which must commend it to general favor.

Want of space prevents the notice of the treatise on the Disease of the Joints, the reception of which was acknowledged last month. It will keep, however, and meanwhile we advise its purchase and perusal by all interested in the subject.

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ORIGINAL COMMUNICATIONS.

A CASE OF AMPUTATION OF THE LEG
SUCCESSFULLY TREATED WITHOUT LIGATING THE ARTERIES.

By H. RISTINE, M. D.,
Marion, Linn Co., Iowa.

During the month of September last, a case of surgery came under my care, somewhat of an anomalous character—to myself, at least; a case of much interest, as well as perplexing, besides procuring no small amount of anxiety for several days regarding its result.

Similar cases may have occurred heretofore, but I have yet to see one of like character, reported through the medium of medical journals, or otherwise.

I have, since the accident, conversed with a number of physicians, regarding its peculiarity, and have met with no one who has ever seen, or had any knowledge of a case of similar character.

The case alluded to was a little girl, daughter of Mr. H. P. Smith, residing about eight miles from this place, who, while playing in the meadow of her father, was accidentally run over by a mowing machine, the scythe of which entirely severed her leg, about an inch above the ankle-joint, without causing any other injury.

I was immediately sent for, and on arriving, which was about three or four hours after the accident occurred, I found her quietly sleeping, without a particle of hæmorrhage, with a good strong circulation; the countenance exhibiting no appearance indicating the loss of much blood. I enquired if she bled much at the time of the accident. The man being present, who carried her to the house, remarked that she bled quite freely immediately following the injury, but it ceased by the time he arrived at the house, which was some two or three hundred yards distant from the meadow. My first impression regarding the arrest of hæmorrhage, was, that syncope from the sudden loss of blood, had temporarily suspended the action of the heart.

Her father, who possessed some knowledge of the circulation, immediately on her arrival at the house, applied a bandage around the injured limb above the knee joint, which I supposed was controlling the hemorrage at the time of my arrival, as reaction, as before remarked, was well established, and the circulation quite as good as in health.

Amputation being necessary, I immediately sent for Dr. Lyons of Cedar Rapids, to assist me in the operation. As soon as he arrived, which was then some seven or eight hours after the accident, I proceeded after placing her under the influence of chloroform, to amputate, performing the circular operation, about three and a half inches above the point where the limb was severed by the machine. I requested Dr. L. to take up the arteries while I would place a ligature on them. There not being a sufficient amount of hemorrhage to enable him to find the vessels, pressure was removed from the femoral arteries which had been compressed by an assistant during the operation by means of his thumb; after which the arteries still refused to bleed a single drop. I then turned my attention to the bandage applied by the father soon after the injury, which I never doubted had controlled the hemorrage up to the time of the operation, but on examination however, I found it sufficiently loose to admit of the introduction of

two or three fingers between it and the limb, which could *not* have had any agency whatever in controlling the bleeding. During all this time the little patient had *not lost one teaspoonful of blood.* After removing every thing that could possibly interfere with the circulation in the limb, it became a mystery beyond our comprehension, why there was no hemorrhage. The temperature of the limb as well as the stump, from the time I arrived, up to the time of the operation was in a natural condition.

We allowed her to recover from the influence of the chloroform, and let the stump remain exposed to the influence of the air, for an hour; there being no bleeding, we resorted to warm applications, which we continued perseveringly for at least four hours, during which time *not five drops of blood* oozed from the stump. After having exhausted all the remedies in our possession to bring about a flood of blood, at least sufficient to enable us to find the arteries, without success, we again put her under the influence of chloroform, dressed the stump in the usual manner, leaving the arteries to care for themselves—taking the risk on their bleeding.

We ordered cold applications to the stump, and left particular instruction with the parents how to arrest the hæmorrhage should it occur during our absence, expecting, in the course of a few hours, to hear our patient was bleeding.

On the fourth day after the operation, I dressed the stump, up to which time there had been no discharge whatever of any kind sufficient to discolor the dressing in the least. The stump healed kindly with very little constitutional disturbance, discharging about the usual amount of pus during the healing process.

There was nothing out of the ordinary course of like operations, save there being no arterial hæmorrhage present, no useless ligature, at the same time reaction freely established.

The hæmorrhage must have been arrested at the time of the child's arrival at the house, without the aid of artificial means, as the bandage, when examined, was not drawn suffi-

ciently tight to control the hæmorrhage in the least, and no other means made use of to guard against bleeding, until at the time of the operation.

I am of the opinion the absence of hæmorrhage was entirely due to the retraction of the vessels, and not as some have suggested, to the formation of coagula, which must have been to the extent of nearly four inches, to have prevented a renewal of bleeding after the operation.

If you can account for the departure from the ordinary course of like cases, on any well established physiological principles, I would much like to hear the argument.

MANAGEMENT OF THE INSANE.

By GEORGE C. McFARLAND,
A Student of Rush Medical College.

The treatment of insanity of late years has become more of a speciality. Thus the student of Medicine when he reads his works on practice merely glances at the subject, and the practitioner himself recommends his patients to the various asylums constructed for their benefit, and little is known in regard to their treatment and management by the profession. Now we would throw overboard a large list of drugs contained in the materia medica. Medicines are of no use whatever. To successfully treat the insane, the asylums are of course the proper place. The patient should not have the idea that he is going to a prison, and be treated as a felon, but let him know the facts; treat him in person, as if he were sane; let the physician in attendance not assume a manner foreign to his disposition; let him approach his patient in a quiet, self-possessed manner. Bring the patient in contact with sane men; let books and periodicals be thrown in his way, and soon he will rouse and the case seem hopeful. We would cite a case that came under our observation.

T. K., brought to the asylum some years ago, having committed a homicide. At the time of his admittance he was very morose and sought to kill all his fellow men; seldom spoke, and when he did would call for a butcher knife to cut his way out. Books were handed him, and in his solitude he acquired a taste for reading; soon after he was taken out to do light work; soon a change was manifest, and at the present time he fills his accustomed seat at the divine service and takes much interest in the proceedings. So much improvement is seen we consider him in a fair way of recovery.

Now we think this treatment could be well introduced in poor houses, for it is well known that, for want of room, our State institution does not come up to the requirements of the State, and poor houses of the various counties become their retreat, and the arrangements they have for the care of the insane is wholly inefficient. Thus we have seen men chained to the floor, a total want of food and clothing, rendering them objects of commiseration.

A man was admitted to the hospital, having had previously for his habitation a hole in the ground, roofed over, with an opening simply large enough for food to be passed down. For years he remained in this condition, and became an object of dread to the people. At last the real estate owners thought this man injured the sale of their lands by his hideous cries, and pronounced him a nuisance. A public meeting was called. Some were for killing him; others again were for constructing a similar den in the woods. The Legislature, however, being in session, some good man caused to be appropriated a sum of money, and he was placed in an Insane Hospital. Coming in contact with men, he gradually began to improve, and at the present time, he is gaining his livelihood in the town as a laborer. Finally, we would say in the management of the insane, let all drugs be discarded; let the patient feel that he is a man; wait upon him in words of kindness, not in violence and deceitfulness; rule him by love, not fear, and we think those called to treat the insane will

meet with success. Occupation which requires thought is far preferable, in a curative point of view, to that which requires none. Thus the artisan employment for men and household employments for women, are much more useful as curative agencies, than the use of the spade and hoe for the former, or the needle for the latter.

Mechanical restraint in the management of the insane is fast going out of date. It was not long since that shower baths filled every ward and the chief employment of the more convalescent patients was in constructing the straight-jacket for controlling the more violent. Now we would discard these wholly. However, where the patient is suicidal, and seeks to injure himself and others, then perhaps a comfortable straight-jacket may be admissable. In conclusion, we would say, this subject of moral treatment that we have suggested may be worthy of larger consideration in the management of the insane.

[*Remarks.*—The writer of the foregoing will be recognized by many of our readers as a son of the sagacious and popular Superintendent of the Illinois State Insane Asylum. While there is no especial novelty in the views advanced, the extreme cases briefly narrated will serve well to illustrate the benign influences of the modern treatment of insanity, in strong contrast with that in olden time. There is an amount of suffering and horror among the pauper insane, even of this State, which would startle the most stolid were it fully depicted. One assertion of our correspondent is too sweeping. "Drugs" are not to be entirely discarded in the treatment of the insane. The advances of the present time in physiology, pathology and treatment have shown that the material lesions, centric and ex-centric, which originate or intensify mental disorders, may be reached, to a limited extent, by skilful medication. Insanity is always a result of material lesion. It is not a merely spiritual affair; but, as in other maladies, hygiene and correct regimen are leading methods of cure.—A.]

A CASE OF HYDROCELE CURED BY THE INJECTION OF TINCT. OF IODINE.

By J. N. GREEN, M. D.,
Of Stilesville, Indiana.

A few months since, I was consulted by H., aged about 25, who had suffered for several years previous with an hydrocele. He had, as he informed me, the thing "tapped" repeatedly by Dr. Mathews, with no other result than temporary relief from the swelling, the effusion returning in a short time, and requiring the operation to be repeated again.

Becoming justly tired of this method of treatment, the patient was induced to inquire after a radical cure, if such could be found. I accordingly recommended to him with much confidence the injection of tinct. of Iodine into the sac as practiced by Prof. Brainard. He at once consented to the operation; and I introduced a trocar into the sac, drawing off the effused fluid and injected what I supposed to be a sufficient amount of tinct. of Iodine in its stead. This done, I told the patient it might be necessary to repeat the process once or twice, but assured him if persisted in he might expect an entire cure. He expressed his willingness to submit to the requisite number of operations to secure this desirable consummation. But fortunately, a repetition of the operation was unnecessary; the patient was cured by the first injection, thanks to Dr. Brainard and the tinct. of Iodine.

I do not report this case because there is anything remarkable in it, or skill in the operation; but simply to add the weight of this case to the large and daily increasing amount of evidence before the medical public, of the usefulness of iodine in the cure of this and analogous diseases. If a case of several years standing may be thoroughly cured by a single injection, what a source of relief is held out to the thousands in the country, afflicted with this unpleasant disease. I trust,

furthermore, that the attention of the medical profession may be directed to this matter, and that they will treat their cases of hydrocele as above.

CASE OF POISONING.

By A. K. VAN HORN, M. D., of Baileyville, Ill.

On September 4th, 1861, S. Walters requested me to visit his daughter, a child about four years old, who, he said, "had been taken with fits," a short time previous. I learned on my arrival, that she had commenced to "act strangely" very soon after her return from a grove, where she had spent the morning looking for berries. Her mother, alarmed at the symptoms, had given a large table spoonful of castor oil, which produced no effect, beyond a slight emesis at the moment of administration. She had continued to grow worse for an hour after reaching home, but since then had remained in much the same condition, in which I found her, on my arrival, two and a half hours after the commencement of her attack. Her symptoms were so peculiar and interesting that I venture to describe them at some length.

Her general appearance indicated good health, and to a casual observer would have presented no very unusual feature, except the fixed, expressionless eye. She uttered no complaint, and except the slight nausea, caused by the offensive taste of the oil, appeared to have had no sickness at her stomach. Her hands, feet, and face were considerably swollen, and hot to the touch; her *face*, *redder* than usual; her body was a little above the natural temperature, dry, and on the more delicate parts a slight scarlet rash was visible; the abdomen was hard, with slight meteorism; the pulse was a little accelerated and feeble; the tongue was not much coated, but

very dry; the mouth and fauces were parched, as if with thirst, and of a dusty, red color. There appeared to be unpleasant sensations in the mouth and larynx, as the patient frequently seemed as if trying to rub her tongue with her fingers, and often clutched at her throat.

But it was on the *nervous system* that the force of the poison mainly spent itself. That part of it, which guides and governs the voluntary motions, producing the harmony of action so necessary to happiness, and even existence, seemed to have resigned its seat to a tricky elf, who revelled in the mad disorder he created among the muscles, and who, touching the wrong keys, like an unskillful player, got not *music*, but *discord*, from the "harp of a thousand strings." Even the external senses, sight, hearing, &c., did not escape the mad spirit's fingers, who filled the "porches of the ears" with strange sound, and led whole troops of phantoms to vex the fixed eye.

She lost the power of locomotion almost entirely, and stood with the air and attitude of one deeply intoxicated. The slightest inclination from the perpendicular resulted in a fall. If assisted to walk, she staggered along, with the body bent forward. Every few minutes she would have an attack of convulsions, affecting principally her legs and arms, and rapid and violent as though caused by an electric shock, but apparently painless. The hearing seemed almost closed to external sounds; but unreal ones were present, as she sometimes inquired, "what made that big noise?" when the room was entirely still. The faculty of speech, though not *lost*, was so changed that much of what she said was unintelligible. Among all the organs, none exhibited so marked peculiarity as her eyes! The pupils were enormously dilated, seeming to cover almost the whole front of the globe, and insensible to light. Unreal objects flitted before them, which she was always endeavoring to catch; but sight was not entirely abolished, as she would grasp at articles presented to her; but she frequently reached too far, or not far enough, as if

unable to appreciate distance correctly. Nor were the emotions unaffected. She talked almost incessantly. After a few moments of silence, she would burst into a violent fit of weeping, which often ended in a paroxysm of boisterous laughter, and thus she swung, "a pendulum betwixt a smile and tear."

In about six hours from the commencement of the attack the symptoms began to decline in violence; her hearing grew more acute, face less flushed, and the convulsions less marked, and recurring at longer intervals. During the night following she slept profoundly, and the next day had no symptoms, save slight vertigo and dilated pupils, which passed off in a short time, leaving to the patient her usual health.

The usual treatment by emetics and cathartics was adopted. There is no known antidole to this class of poisons. Very large doses were required to produce any effect, as the stomach and bowels seemed paralyzed and impassive to the amounts ordinarily administered. No traces of the poison were seen in the evacuations. Large quantities of stramonium were found growing near the house, and in the grove, where she had been wandering, many stalks of a plant answering to the description of belladona were found, each full of its beautiful, but treacherous red berries.

Both of these poisons belong to the class called by Wood, *Cerebral Stimulants*, and have many symptoms in common; but from a consideration of all the symptoms, I incline to the belief that the child had eaten berries gathered from the Deadly Nightshade.

QUESTIONS, AS TO THE VELOCITY OF THE BLOOD'S MOVEMENTS.

1st—Is the teaching that the heart sends into the aorta 3 oz of blood per second, and that this blood moves 12 inches in the same length of time, consistent with the known size of that vessel?

2nd—Considering the aorta always filled with blood, (*which must be the case*,) can the blood move farther per second than the 3 oz of blood would fill the cavity of the aorta in the quiescent state?

This, if the diameter of the aorta is 1 inch, would be near 7 inches. If 15 inches, would be little more than 3 inches.

3rd—If the 3 oz of blood received each second, fill 6 inches of the cavity of the aorta, and move 12 inches in the same length of time, would it not get 6 inches clear in advance of the following 3 oz of the next second, or leave the artery but partly full?

4th—Are the combined cavities of the capillaries, arising from any given artery, four hundred times as large as the artery, which must be the case,) if the (as we are taught) blood moves 12 inches per second in the arteries, and moves 3 inches in the capillaries, in the same length of time?

5th—Make the aorta four hundred times as large as it is, and would a man be "*big enough to hold it?*"

6th—What is the diameter of the ascending aorta?

Will some one please answer?

Respectfully, R. H. C.

SELECTED.

SEROUS APOPLEXY—CLOSURE OF OS UTERI, &c.

CASES REPORTED TO BUFFALO MEDICAL ASSOCIATION.

Dr. Miner reported the following case which he had recently visited in the country, which exhibited evidences of effusion, complicated and modified by some nervous affection resembling more the convulsion of epilesy than any other disease.

August 2d, 1861—Visited C. S., aged 35, of healthy, robust constitution, by occupation a farmer, and accustomed to active labor. Ten years since, he was injured by the falling upon his chest of a barrel of salt; since which time, after unusual fatigue or exposure, has had a peculiar spasm, involving the whole system, and appearing in many respects like epilepsy. The day previous to this visit, had suddenly fallen while working in the field, clasped his head firmly, declaring that some one had struck him, and complaining of pain in the head. He lost in a few hours all power of speech, but could write, and in that way made himself understood; pupil was dilated; conjunctiva conjested; voluntary motion slow and uncertain; tongue could only be protruded very slowly and considerably to one side; pulse slow and full; respiration labored; at times a remarkable tonic spasm commencing upon one side and gradually extending over the whole system, would fix and hold for several seconds every muscle; respiration, and as far as could be discovered, the circulation for the time cease, the patient being immovably fixed, often times in very unnatural position; at length the spasm would gradually relax, a deep inspiration would follow, and a profound sleep or coma would succeed, from which he could not be aroused, but which would pass away, leaving him as before, the whole process lasting half an hour or more.

In a few weeks he visited this city, and while here there was sudden increase of the paralysis of left side. After again returning to his home he was attacked by some acute disease of the throat, which made him very sick, as reported by his wife; during this sickness, and after being unable to speak for two months, he was altogether overjoyed to find on awak-

ing one morning, that he could speak quite plainly. This is the point of especial interest, and the reason for relating what would otherwise seem unworthy of mention.

Cerebral effusisn is supposed not unfrequently to occur in the course of convulsions, especially puerperal convulsions and epilepsy, the conjestion which is produced, acting as a most efficient cause. Possibly the true character of this attack has not been apprehended, and it may be differently regarded by equally accurate observers. It is difficult to satisfactorily explain the sudden restoration of speech, upon the ground of absorption of effusion, and equally difficult to account for the phenomena observed, upon any other hypothesis than that of conjection, producing pressure and loss of function, or effusion of either blood or serum.

Prof. White remarked that the subject of serous apoplexy, interested him greatly; recollected visiting, the first year of his medical practice, a man at the Old Eagle Tavern, who had apoplexy. He had been riding for several days and nights; was greatly exhausted, and unquestionably had serous effusion. The patient was bled largely; the practice was approved by his preceptors, and the young physician was highly commended for his energetic and heroic conduct, his active and vigorous treatment; he has long since come to regard it as exceedingly inappropriate. Dr. W. also spoke briefly of a case treated by Prof. Flint and himself, where they found on arrival at the bed-side of their patient, a practitioner who had been temporarily called, bleeding the patient in a full stream; insisted upon the immediate closure of the vein; regarded it as a case of serous effusion; the patient died. From that time to the present, has made a wide distinction in cases of apoplexy, and desired to call the attention of the profession to the fact, that anemic females were very liable to one form of the disease. Expressed the fear that many physicians were not even now sufficiently aware of the impropriety of indiscriminate bleeding, in cases of this description, or did not carefully discriminate between serous and bloody effusion.

Prof. White reported a case of adhesion of the lips of the uterine outlet from inflammation, occasioned by mechanical irritation in an attempt to procure abortion.

M. W. at the Buffalo Lying-in-Asylum, Oct. 17, unmarried; first pregnancy; menstruated last about the first of January, 1861; quickened in May, and expects to be confined in the latter part of October. She confesses to having used a large wire or rod of iron, when three or four months advanced in

her pregnancy, for the purpose of procuring an abortion. Says "when the wire was introduced some blood followed immediately, and this flowing was soon succeeded by great pain and tenderness in the lower abnormal region, as well as heat and discharge from the genitalia.

September 24—The Sister in charge of the ward informs me that Mary has had pains most of the night, and that they are now quite severe. Upon instituting a vaginal examination, no opening could be found in the lower segment of the uterus. By carrying the fingers carefully up to the junction of the uterus with the vagina posteriorly, and bringing them anteriorly to the pelvic symphysis, there could be found only a slight inequality—a slight elevation of cicatrix, in the lower surface of the uterine tumor. The stehescope applied to the abdomen showed the fœtal heart to be distinctly heard below the umbilicus, upon the left side, and quite low down, and she has all the ordinary indications of having matured her pregnancy. A dose of castor oil was administered, which moved the bowels freely. During the succeeding day and night the pains continued without abatement, and on the 25th found her quite exhausted with fatigue and sleeplessness. The parts continued without change, except that the uterine neck had been pushed somewhat farther down into the pelvis. In the hope that nature, unassisted, would eventually break up the adhesions between the uterine lips and save the necessity of any operative procedure, I directed a large anodyne enema to be given. The pains were lessened, and the patient was able to obtain some refreshing sleep, and take a little nourishment.

During the next three weeks she continued to have recurrences of severe pains, which were permitted to continue until her strength began to fail, when the effort would be made again to control them by anodynes. It required a grain of morphine, and this had sometimes to be repeated, before the gravity of these pains could be so far lessened as to procure sleep. Quinine and beef essence were freely given, and as the pulse and exhaustion did not indicate the danger imminent, interference was postponed from day to day, awaiting an emergency which would demand immediate action. Meantime she was visited by several medical gentlemen, among the number my colleague, Prof. Rochester, who on several occasions made unsuccessful efforts to detect an opening in the lower segment of the uterus.

At length the 16th of October, and the 22d day after the

commencement of labor pains, having resolved that something must be done for her relief, I again made a careful vaginal examination. Placing the finger upon what seemed the cicatrix of the os, I made steady, continuous pressure for some time. Upon the recurrence of the pain the pressure was increased until finally the adhesions gave way and permitted the finger to pass into the cavity. She was then left with directions to be sustained by beef essence and brandy until the next morning. Upon examination on the 17th, the orifice was found one and a half or two inches in diameter, though yet rigid and cartilaginous. At 3 P. M. the head had cleared the os and descended into the pelvic cavity. The pains being now inefficient and the woman much exhausted, the labor was completed with forceps, the patient being first brought under the influence of chloroform. She was safely delivered of a male child, weighing 10 lbs., the skull firmly ossified, and presenting all the appearance of a child a month old. From this time, nothing unusual occurred, the woman convalesced rapidly, and both mother and child are now ready to be sent out of the Asylum.

This case suggests several points of interest. In the first place, there can be, in my mind, little doubt that the occlusion was occasioned by the inflammation, superinduced by the mechanical efforts to procure abortion. How often this danger may be incident to the reprehensible, (though truth demands we should add not unfrequent,) resort to such means for procuring abortion, it would be difficult to estimate.

Not the least interesting point illustrated by this case, is the absence of danger attending delay in the first stage of labor. For more than three weeks was this woman scarcely free from pain for a moment, and then only partially quieted by large doses of opium, and much of the time she was suffering severely, and yet her labor terminates safely to both mother and child. Had the head descended into the pelvic cavity and entered fully upon the second stage of labor, it could not have been delayed one-fortieth part of that time, without endangering the integrity of the maternal tissues lining that cavity, and threatening the life of the child from pressure upon the head.

It will be remembered by several of the members of this Society, that some years since I reported two cases of complete occlusion of the uterus. One of these occurred in the practice of Dr. Charles H. Wilcox, and the other was under the care of Dr. Baker. In both, surgical interference was

rendered necessary, and successfully resorted to at a much earlier period. The instance just related will scarcely form a precedent which it would be safe in all cases to follow. It will, however, always be well to delay any incisions through the occluded neck, in the hope that nature herself may open the way, until symptoms are present requiring our interference.

Dr. White called the attention of the Society to the use of "sponge tents," for dilating stricture of the rectum. He had recently resorted to them in the following case, with very gratifying results, and hoped upon further trial by the members of the Society, they might be found useful in many cases of simple stricture, non-malignant in character, and situated near the anus.

Mrs. W., aet 26, was married at 16, had her first child after a severe labor at 19 years of age. Her convalescence was protracted, during which she suffered from pelvic abscess which left her with *fistula in ano.* Two years subsequently she was operated upon for fistula by Dr. Bigelow, of Boston, with entire relief. Since that time she has been troubled with difficult defecation, growing more and more anoying until now, the fecal matter can be expelled only by great effort, and after taking large warm water injections. When the stools are so consistent as to be moulded by the stricture, they are not larger than a "pipe stem," and are expelled with the utmost difficulty. Her general health has become gradually impaired during the last year, and she now consults me for relief.

Upon making a digital examination of the rectum, a soft stricture is found two or two and one half inches above the sphincter and just at the point where the incision seems to have been made for the cure of fistula. The point of the finger could not be inserted into it by any amount of pressure which the patient could endure. Being in the habit of using sponge tents for dilating the neck of the uterus, it occurred to me that they might be made available for the purpose of dilating rectal contractions. Accordingly I inserted a large and long uterine tent, as far as possible into the stricture; this tent was not more than three lines in diameter; directed her to sit down in a warm bath. In thus supplying warm water to the outer extremity of the tent, instead of waiting for the purulent fluids from above to be first absorbed and enlarge the upper end, the difficulty of withdrawal was obviated. The result was highly satisfactory. The tent gradually expanded from below, and so gently, that, soothed by

the warm water, she was able to permit its complete expansion before she withdrew it. The relief was so manifest, I was induced the second day after to insert a tent four or five times its diameter, and very firmly made. This, like the preceding, was permitted to completely unfold before removal, and considerably increased the dilitation of the stricture. Two days subsequently a tent, measuring a little more than half an inch where it occupied the stricture, was in the same manner introduced and soaked with water until fully expanded. Some difficulty was experienced by the patient in withdrawing the tent on this occasion, in consequence of the part of the tent situated above the stricture becoming saturated and fully expanded. The finger could now be easily passed completely through the stricture, and the indurated edges were found greatly softened and absorbed. She was now furnished with a rectum bougie, the diameter of which is more than an inch at the point where it engages in the stricture, and directed to insert it frequently to prevent its recontraction. The patient believed herself completely relieved of the local difficulty, and her general health is greatly improved.

Dr. White closed his remarks by expressing the hope that other members of the Society would be induced to make trial of the tents in analogous cases, as he was aware that nothing could be established by a single case, but confessed to great confidence in the success of the plan here adopted.

Dr. Miner thought the means adopted by Prof. White for dilating stricture of the rectum ingenius, philosophical and efficient, certainly in the hands of Dr. White. Had never been greatly pleased with the sponge as a dilating instrument; could not think that the expanding force of a dry sponge from the absorption of moisture could be very great; had never been able to introduce sponge with sufficient force without its bending or breaking; had often thought a conical instrument made of soft rubber more cleanly, durable and efficient. Spoke of the readiness and rapidity with which absorption of the fibrinous deposit, which the usual cause of stricture, would sometimes take place, especially in the urethra, when an instrument was passed down so as to press somewhat upon it, even though no dilating process is instituted. Could not offer any experience in the treatment of stricture of the rectum, since it was one of the rarest forms of disease, disconnected with scirrhus, and based his remarks upon his observation in stricture of urethra, which had many features in common with it. Stricture of the rectum treated

successfully by whatever means adopted, is of interest and importance, such disease being generally very intractible, it being difficult to obtain complete and permanent relief.

Dr. Kempson would quite agree with the remarks of Dr. Miner, that the relation of this case in which the ingenius application of sponge as a dilating medium in the stricture of the rectum, might result in the formation of a very useful instrument by bringing to its aid India rubber. Thought a hollow elastic tube, filled with dry sponge, cut to the proper size, would be easier introduced than sponge alone, and moisture would compel the tube to expand. Dr. K. also related a case of severe injury of the rectum, observed by him while a student of medicine in Kidderminster, England. A robust young man fell backwards upon an inverted blacking pot, while in the act of relieving his bowels, with such force as to completely drive it within the rectum beyond the reach of the fingers; the pot was one and a half inches at the top and one inch at the bottom in diameter, and about three inches high, every effort to extract having failed, the pot was broken and the pieces very carefully removed. The next morning violent inflammation set in; he was bled largely, and at intervals as many as 60 leeches were applied; however, he sank rapidly, and died, in fifty hours after the accident. Dr. K. would ask if it had not occurred to any one present, that cases of imperforate os-uteri were sometimes produced intentionally by the manipulations of physicians, who do not hesitate to depart from the legitimate object of our art, and in order to pander to the lascivious desire of their patients, and allow them freely to indulge in illicit intercourse, have recourse to various methods to bring on adhesive inflammation of the womb and produce a complete closure of the orifice. This is done under the guise of healing ulceration of the neck of the womb, &c., and these cases constitute the great bulk of the practice of a Canadian practitioner who enjoys a high reputation among the best classes of Canada; at least so he is told. If it is so, hoped that these remarks might reach his ear, or his eye, that he may desist from such diabolical practice.—*Buffalo Reporter.*

VARIATIONS OF ANIMAL HEAT AS A CAUSE OF DISEASE.

"TAKING COLD."—ARTIFICIAL WARMTH.

From Dr. Ware's Lectures on General Therapeutics

The remarks that have been made on certain states of the skin, naturally bring us to the subject of animal heat, the variations of which are chiefly connected with the skin and its sensations, whilst the influence of cold on these variations and consequently on the production, phenomena and course of disease, is constantly to be taken into view in its treatment. Although it is universally conceded that exposure in various ways to external temperature, is one of the most efficient causes of disturbances of the health, we know very little of the laws according to which this takes place. In common opinion nothing is regarded as more certain than that disease is constantly produced, and that the symptoms of disease are constantly modified, by what is familiarly spoken of as "taking cold." Yet almost no exact knowledge is possessed of the mode in which this effect is brought about, or of the conditions of the body itself, or of the external agents on which it is supposed to depend. The common notions so confidently entertained concerning the whole matter afford us one of the most remarkable of the examples, only too common, in which we mistake the habitual use of certain forms of expression, which have become familiar, but to which we attach no definite idea, for a clear comprehension of the subject to which they relate.

The easy solution thus resorted to for the purpose of explaining the effects of "taking cold," is used on occasions of the most opposite kinds, and for very different diseases. It is employed without at all understanding the manner in which the animal heat is modified by the circumstances of the exposure, or of the manner in which the modification operates to the production of disease. The most common idea is that we take cold by the withdrawal, in some way, of the heat of the body. Yet it is manifest that this withdrawal takes place in such a different manner, in such a different degree, and under such different conditions, that there can be no uniformity in its *modus operandi* as a cause. Whilst, on the one hand,

the same disease is produced by very different modes of exposure, on the other, the same mode of exposure will in other cases produce very different forms of disease. Thus, in one case where cold is taken, there has been but a momentary exposure of a small part of the body to a cause which can produce but a very slight loss of animal heat, as a draught of cold air; in another, a large quantity has been abstracted from the whole surface, as by remaining a long time in the water, or exposed to a high cold wind; in another case, no assignable impression of the kind has taken place at all, and yet, in each, disease has been produced. Colds, of apparently the same character, prevail under circumstances the most diverse, as in cold weather and warm weather, in dry weather and damp, in uniform weather and in variable, in one kind of season and in its opposite.

The most reliable results we can extract from the vague mass of observation on this subject are, that sudden exposure, especially when the body has been much heated, the skin is in an excited state, and the body is insufficiently or less than habitually clothed, or when the weather has suddenly changed from warm to cold, or from cold to warm, is a condition under which the cases we attribute to cold are very likely to arise; that the gradual, and still more the rapid abstraction of large quantities of animal heat, however this is brought about, are also likely to produce disease, but in this case of a more deep-seated, continuous and obstinate character, though not always more violent; but that the most extensive, though less obvious injurious effects of cold are found among those who are exposed through long and inclement seasons, with deficient protection by habitations, clothing and fuel, especially among the young. It is to be observed, however, that there is no uniformity in the degree or kind of the effects which are thus produced, and that it is but a limited proportion of the persons exposed to these causes who are unfavorably affected by them. Hence we are obliged to infer that we can justly consider the disturbance of the animal heat as constituting but one of the conditions upon which depends the origin of the diseases usually attributed to taking cold.

We are not likely, then, to derive any considerable aid in the direction of treatment from our knowledge of the connection of the scientific history of animal heat with the production of disease, and we are obliged to depend mainly on the teachings of observation and experiment. In the early stages of acute diseases, there is usually some over-production or ac-

cumulation of animal heat; this, when excessive, causes no little suffering and restlessness; and many of the other troublesome symptoms of the febrile condition seem closely associated with it, such as headache, pains in the back and limbs, want of sleep, and thirst. Whether the accumulation of heat is the cause of these other symptoms or not, it is very certain that the alleviation of the heat of the skin by cool air, cool sponging, the application of cold cloths or ice to the parts most affected, and cool drinks, not only give relief to the sensation of heat, but tend also to mitigate the other febrile symptoms. How much this relief actually contributes to the removal of disease, we cannot say, but the quieting of pain and thirst and the production of sleep are always important objects to secure.

But throughout some acute diseases, and in the advanced stages of all, there is a diminished production of animal heat. Notwithstanding this, there may still remain a tendency to occasional exacerbations, but more limited in extent and continuance. In such cases the loss of heat becomes exhaustive, and should be guarded against by attention to food, clothing and the other hygienic conditions which will prevent this loss. The warmth of the body, as a whole, is to be watched and maintained. Yet there is in this state of things no inconsistency in the application of means for the relief of the temporary attacks of heat, locally or even generally. The main principle to be held in view, is to prevent that general depression of the powers of the system which is so certainly the result of a permanent draught upon its efforts for keeping up the temperature of the body. The effects of this exhaustion are not always perceived by the sensation of cold, but often by a disturbance of some of the internal functions. Thus, a convalescent will experience a loss of appetite, headache, neuralgic pains, watchfulness, troublesome sleep, as well as other symptoms from a considerable fall of temperature in his chamber, of which he is hardly sensible, but which a careful observation of the cause of the phenomena will satisfy the physician has been due to cold—not to taking cold in the ordinary sense of the word, but to the general depression of vital force due to its disproportioned expenditure in the maintenance of temperature. This especially manifests itself in organs which have been the subjects of the disease, and hence the great relief often experienced from the application of direct warmth, and also of extra clothing, to such parts.

Perhaps the most common mistake in attending to this point, is to overlook the necessity of the access of fresh air to

sick rooms, and to endeavor to maintain their warmth mainly by keeping out of cold air, instead of warming that which is introduced. Breathing cool, or even cold air, is seldom injurious, and carries off but little heat, where it is pure and fresh, if the body be surrounded by a sufficient amount of non-conductors to preserve that which is generated.

It is sometimes observed that the external surface of the body is cool, while the patient experiences the sensation of heat This is often noticed in common cases in a slight degree, but in some violent diseases it is exhibited in a very striking degree. The skin of the patient is cold, even icy cold, but he seems to himself to be burning with intense heat. No external means will warm the body, except as it will warm a corpse; it even seems more difficult than this—and it becomes cold again, as soon as applications are suspended. There may be an occasional and limited flush of heat, but for the most, the coldness remains till death, when the case is fatal; but then, the surface, which could not be warmed from without, during life, becomes gradually warm from within; and, in some cases certainly, the internal viscera are found very warm, and even at a higher than the normal temperature, if the body be opened. In this singular state of things, most noticeable in cholera, it would seem as if the animal heat was prevented from diffusing itself during life by some modification of the law of conduction dependent upon the presence of vitality, but on the cessation of life is permitted to obey the ordinary conducting powers of the textures.

Every one acquainted with cholera has probably observed, in the collapse of this disease, how useless was the attempt so persistently made to make the patients warm by hot-air baths, hot sand, hot bricks, etc., and how much discomfort was occasioned by the attempt; whilst, on the other hand, how grateful to them was cold sponging, the administration and application of ice, and the free admission of cold air to the skin and lungs, and this although the breath was sometimes itself cool. May it not be that the relief thus experienced has some connection with that modification of the conducting powers of the textures just suggested as a probable explanation of those singular phenomena; and some indirect connection also with the familiar fact that persons or parts which have been chilled or frozen, are more speedily and safely relieved by cold applications than by warm. All such facts probably have a significant relation to the various phenomena of disease connected with cold and heat, and these sensations of the patient; and

also with chilliness, shivering and ague turns, all of which are connected with these sensations, and with various disturbances of the nervous system.

In chronic diseases, the management in reference to animal heat enters more universally into the plan of treatment than in acute. In acute it is rather incidental; in chronic it is fundamental. A due equilibrium between the production and transmission of heat is essential to the perfect performance of all those functions on which, as formerly stated, the processes of recovery depend. The regulation of all the habits of life as to clothing, habitations, artificial warmth, climate, exposure, air and exercise, have some connection with the maintenance of this equilibrium, and although in a state of health, and to a certain degree under disease, we can endure a certain amount of departure from it, yet, in proportion as disease is present, the capacity for this endurance is diminished, and it becomes important to prevent the unfavorable effects of it. In a majority of chronic diseases, the heat-making and cold-resisting capacity appears to be impaired, and since, partly as the consequence, exhaustion, debility, and a defect in the power of recovery are the prevailing tendencies of these diseases, the regulation of all the habits which relate to this point should be a constant subject of regard.

Under the ordinary exposure of mankind, even in the hottest climates, the current of heat is from within outward, and it rarely happens that we do not part with more heat than we receive. In some seasons and in some countries the quantity lost is small, and of course there must be a large check upon those vital operations by which heat is developed. This check, however, seems to be, taken alone, seldom injurious, and the diseases of hot climates, so far as we can refer them to the influence of accumulated heat, are few as compared with those of cold. It is notorious that hot climates and hot seasons are healthy, except so far as we can trace the origin of disease to causes generated by the action of heat upon substances outside of the human body. But it is not so with influence of cold, for although many other causes co-operate with and intensify its agency, we yet know that by itself alone it deteriorates health and produces disease.

In managing most chronic diseases, therefore, it is the demand upon the body for its heat, and the necessity of arranging the habits of the patient with a view to this, that we have to consider. Not only the ordinary demand for the evolution of heat continues, but generally a diminished capacity exists

for this evolution, and consequently a liability to be injured and exhausted by it, which does not exist in health. Doubtless there is a great difference in the power of different individuals in this respect, but there are few in whom the capacity for resisting cold is not diminished by all chronic disease. In practice, it is always safest to err on the side of too much precaution than too little, especially in the matter of clothing. Persons will often suffer in their sensations from too much, but rarely in their diseases.

This is true even of the general clothing of individuals in temperate climates in health; and I believe it to be a fact, and an important one, that the most common fault in such climates is to endeavor to get along with too little clothing, and that it is really a safer rule to wear as much clothing as we can bear without discomfort, than as little as we can without it. Doubtless there are individuals with regard to whom this is not true, and cases in which they are exhausted and debilitated by much clothing, whilst they are refreshed and invigorated by diminishing it. But this I am convinced, after long attention to the point, is rather exceptional, and yet frequent enough to make a due regard to it proper in every case. There are many general rules in practice, but no universal ones, and this is so here.

I can only now state this general principle of the sanative effects of preventing the dispersion of the animal heat. Its practical management runs out into so many details which require to be modified by constitution, circumstances of exposure, and character and stage of disease, that they must be left to the knowledge and good sense of each practitioner. The greatest error perhas on this point arises from the disposition to substitute external warmth by artificial heat, and the exclusion of air and confinement within doors, for adequate clothing. The effect of this error is to deprive patients with chronic diseases, and even persons with simply feeble health, of the invigorating influence of external air. Bad and variable as our climate is, there are few individuals who may not, by the careful and gradual cultivation of the habit, acquire the power of going abroad in all seasons and almost all weathers, not only without danger but with positive benefit. More persons induce imperfect health by the habits of seclusion engendered by the fear of taking cold, than are actually injured by taking cold. No doubt an artificial state of the system in this particular is produced in many persons, and no sudden change of habit would be safe. Their management

should be cautious and delicate, but there are probably few in whom the change might not be brought about. This is even true of a class of complaints—those of the throat and lungs—usually regarded as peculiarly liable to injury from exposure. The use of the respirator is especially valuable in such cases and is almost universally sufficient to prevent injury. Even the irritating and harassing influence of the east winds of spring is thus signally mitigated. This instrument is also capable of performing an important office in husbanding the animal heat, and many persons are thus kept warm by it and secured from the influence of cold, by a much less amount of protection than would otherwise suffice.

The application of artificial heat to particular organs, and also the prevention of the escape of the natural heat from them, is often found of important aid in relieving many of the sensations of disease, and probably also in promoting their recovery. A diseased organ, as well as a diseased system, may be unfavorably affected by the exhaustion of its heat, and derive a consequent benefit by preventing it. I have already referred to the good effects of guarding organs which have suffered from acute disease, or exposure during convalescence. The examples of a corresponding advantage to organs affected with chronic disease are even more numerous. Local pains, both rheumatic neuralgic and from chronic inflammation, affections of the kidneys, bowels and uterus, and many of the throat and lungs, furnish numerous examples of this sort.

It is obvious how many other particulars of treatment are suggested by these considerations, and yet how impracticable it is to enter into them in a consideration whose object is to illustrate merely the principles upon which treatment is to be conducted, and not to enter into a full account of its details. —*Boston Medical Journal.*

NATURE AND ART IN THE CURE OF DISEASE.

"Another insidious and plausible mode of discountenancing the use of drugs is to represent them as 'unnatural,' and to speak of 'Nature and Art in the cure of disease,' as if there were some antagonism between them, and as if the use of drugs were artificial, and, if so, reprehensible.

"Just as one portion of popular error arises from ignorance of facts, so does another and more inveterate set of errors arise from the use of words 'Nature,' for example, is a word that is incessantly quoted. It is 'natural,' we are told, to wear the beard; 'natural' to drink when thirsty; 'natural' for mothers to suckle their infants; and, as the authors of two-penny treatises and lecturers on diet never fail to tell us, it is 'natural' to eat brown bread. Popular books on medicine are rich in this sort of practical joke, if we may call anything a joke that destroys human life, for we hold that bad logic destroys more lives than gunpowder. For example: one of the popular books on medicine which we reviewed lately (and by no means the worst of them) contained a story such as this:—'A monthly nurse once asked me, if she should give some gruel to a newly-born infant. I replied, "Now don't you think, nurse, that if *Nature had intended* it to have gruel, the child would have been born with a bottle of gruel round its neck?"' This poor woman of course was vanquished by this precious piece of argument; yet she might fairly have asked, in return, had Nature intended the cord to be divided; had she meant the child to be washed and dressed, and whether scissors, thread, hot water, soap, sponge, violet-powder, and cambric chemisettes might not have been objected to on the ground of unnaturalness, quite as much as gruel. The fact is, that the word *Nature* is used to signify at least two independent ideas. One is that brute, naked state in which any given thing happens to be found without interference or improvement by the hand of man: *a state of Nature* as it is called. The other meaning includes the whole faculties and capabilities, including the circumstances favorable to full and luxuriant growth and development. Thus, man in a state of Nature (to use the word in one sense) is a filthy, stinking, verminous savage, thoroughly selfish and utterly deficient in those finer feelings of love for parents and children which we, educated under the influence of Christianity, are wont to call 'natural affections.' But the nature of man (to use the word in the other sense), includes the possession of conscience and reason, which teach him to check mere brutal instincts, and prompt him to explore, subdue and utilize all the objects he meets with, and to employ them in such a way as to produce for himself the greatest amount of beauty, comfort, health and strength. Hence to denounce or sneer at, as *unnatural*, the use of drugs, which man's instincts prompt him to seek, and his intellect enables him to find, is a monstrous and mis-

chievous perversity. But so it is. A patient in a well-built house, in a comfortable bed, fed with food and clothed with textures from all quarters of the globe, and dependent for his comforts, and even his life, on the accumulated products of centuries of human art, is supposed to be treated *naturally* if he takes no medicine: the case is 'left to Nature;' but if any of those beneficent means be used which have also been slowly gathered together during the progress of human civilization—leeches, for example, to take a little blood where it is superfluous; anodynes to procure sleep, or aperients to empty the bowels—forsooth this is unnatural and artificial! and therefore suspicious if not positively wrong.

"Let us say, emphatically, to administer drugs out of mere routine is contemptible. To give unnecessary medicines for the sake of adding to professional profit is degrading. The rash and blindfold heroic practice of giving active remedies in all cases (whether bleeding or brandy) is dangerous. To neglect air, food and regimen, is to let half our weapons lie idle. But we do desire most earnestly to vindicate and uphold the rational and temperate use of those drugs which are employed in ordinary practice; because they can produce effects quickly, which cannot be obtained quickly from rest, diet, or other appliances, and because auman suffering may be enormously mitigated by them. Whilst we get rid of the old apothecary traditions, let us avoid that half-indolent, half-skeptical spirit that would rob us of some our most valuable instruments, and encourage the public in prejudices that have been but too successfully instilled by our adversaries. Let us study the practical art of healing, and the uses of drugs especially, for, in the words of the author of Ecclesiasticus, 'He that is wise will not despise them."—*London Med. Times & Gazette.*

RESEARCHES ON THE DEVELOPMENT OF TUBERCULOUS MATTER.

By DR. LAVARAU,
Professor in Val-de-Grace.

Microscopical studies have followed, in France and Germany, two different paths. Less prompt in making use of this marvelous means of analysis, we have applied it with a sort of distrust which has kept us in the circle of precise determina-

tions; in Germany the same success of microscopy seems to have drawn many into the error of attributing to theoretic explanations, founded on a progressive science, the value of the facts which only owe their importance to the method which has produced them. For our neighbors, the cell is the point of departure for all organic processes, the centre of a local irritability and a circulation more wonderful than that of the absorbent and exhalent vessels of Bichat,—and in fine a being in a being, since the cell partakes with the egg and grain of seed the characteristic of being produced always from a pre-exisiting cell. *Omnis cellula a cellula* is henceforth the formula of a new medical doctrine which excludes all interpretation borrowed from the doctrine of exhalation and hyperæmia. Like everything which emanates from its author, the cellular doctrine is as remarkable for the ingenuity of the views as for the truth of the observation. It furnishes numerous and important facts, gives a more complete knowledge of the inflammatory process, and the relations of pathological formations with normal nutrition; but it seems to us to serve in suppressing from physiology hyperæmia and hypercrinia. How can we explain the fibrinous formations on the mucous and serous membranes without a physiological interpretation as well founded as that which invokes conditions of irritation in the cells themselves? How are we, in taking no account of it in tuberculization, or rather in passing by a doctrine so important without examination, or adopting it without submitting it to a sufficient criticism? I have, therefore, thought that the subject of tubercle one of the anatomo-pathological questions the most worthy of interest, would not be uninteresting in presence of the cellular doctrine.

Opinion of Authors on Development of Tubercle.—The opinions on the mode of development of tubercle may be reported in two different points of view. For one party, tubercle is the product of a morbid exudation; for the other, the consequence of atrophic degeneration of the normal elements of our tissues. The first opinion is generally that of the French physicians, and of German physicians of the Vienna school, and of some English physicians, as Bennett, Ancell. MM. Andral, Lebert and Mandl consider tubercle as a product of secretion. "After its excretion, tubercle takes at first a compact form," says Lebert. "We may affirm," says Mandl, "the tuberculous matter was primarily liquid; coagulation takes place immediately after exudation." Ac-

cording to Gerber, fibrinous tubercle comes from exuded plastic matter which has not been reabsorbed nor transformed into pus. "With regard to the origin of tubercle," says Vogel, "we can not doubt that the substance which produces it may be furnished in the liquid state by the capillary vessels." Albers and Czermack hold the same opinion. Rokitansky considers tubercle as produced by the exudation of a particular nature.

Metamorphosis.—The opinion which attributes the development of tubercle to the atrophic metamorphosis of the elements of our tissues has been introduced into our science by Henle in Germany, and Addison in England. Henle applies to tubercle the opinion emitted by Muller on cancer; viz: that the formations are composed of primary cells, more or less altered. Addison attributes the production of tubercle to the metamorphosis of the white globules of the blood. When the normal elements undergo their metamorphosis in an incomplete manner, the normal products are replaced by those of a retrograde nature. M. Kuss, of Strasburgh, has published in France the ideas of the German school. He expresses his opinion in the following language:

"In the beginning, the epithelial globule preserves its principal optic properties—it remains transparent; from this the initial forms of grey granulation, of infiltrated gelatinous tubercle. Later, the slow accumulation compresses, wears out and causes the skeleton of the lungs to disappear; that is to say, the vascular membrane of the cells, then the epithelial globule, after a certain lapse of time, dies, mummifies, shrivels, changes its optic properties, and becomes more opaque. It is this form which has been taken for the corpuscles of tubercle. As to tubercle of other organs, it is also the result of mummification of normal tissues under the form of elementary globules. We may then define tuberculization, the death and the mummification of a normal tissue, or accidentally characterized by small globules like to those of the pulmonary parenchyma of the kind that Henle calls *elementary corpuscles.*"

For Reinhardt, tubercle is the product of fatty degeneration of epithelial cells. Shroeder Von der Kolk considers yellow tubercle the result of the swelling of the epithelial cells by plastic matter. Finally Virchow attaches to this opinion the authority of his name in different publications, especially in his *Cellular Anatomy*, on page 399. In my opinion, says Virchow, tubercle is a granule, or a knot, and this knot con-

stitutes a new formation, which at the moment of its first development possesses necessarily the cellular structure, and springs, like the other new formations, from the connective tissue. When this new formation has arrived at a certain stage of its development, it shows, in the middle of the normal tissue which it occupies, a small prominent knot composed of small cells with one or several nuclei. That which characterizes especially the new formation is its richness in nuclei, and when we observe it in the surface of the tissue we see almost nothing but nuclei. If we isolate these products, we find either small elements with nuclei so small that the membrane lies directly in contact with the nuclei, or more voluminous cells, in which the nuclei are divided, and may be seen to the number of twelve, twenty-four, or thirty, in a single cell; the nuclei are small, homogeneous, and of an aspect but slightly shining. This stricture, which in its development is comparatively most nearly related to pus, inasmuch as it has the smallest nuclei and relatively the smallest cells, is distinguished from all the more highly organized form of cancer, cancroid and sarcoma, by the circumstance that these contain large, voluminous—nay, often gigantic—corpuscles with highly developed nuclei. Tubercle, on the contrary, is always a pitiful production, a new formation from its very outset miserable.

The difference of opinions on the question of pathologico-physiology relative to the development of tubercle is equally exhibited on the question of its nature and appearance.

Organized Product.—For one party, tubercle is organized, containing cells with nuclei. Geber distinguishes non-organized albuminous tubercles from fibrinous tubercles constituted by tubercles containing cells with a nuclei having the power to organize themselves into fibres. Gellerstedt considers tubercle as living the same life as tissues deprived of capillaries, as the nails and hair.

For Rokitansky, tubercle forms the transition of non-organized to the organized productions. Schroder Von der Kolk believes, that grey tuburcle may transform itself into cellular fibres.

Non-Organized Product.—The largest number of microscoscopists regard tubercle as a product of excretion, presenting no one of the attributes of organization. For Koestlin, tubercle never raises itself beyond an inferior degree of organization of an amorphous substance containing nuclear elements. This is also the opinion of John Simon, Henle, Kuss

and Virchow, who regards it as the product of decomposition of normal cells; and especially of M. Mandl, who sums up his opinion on its pathological anatomy in the following language:

"The tuberculous matter is not composed of elements which may increase and develope themselves. The multiplications and increase of tubercles can not consequently be explained except by juxtaposition. Tuberculous matter is a non-organized amorphous matter."

Aspect of Tuberculous Matter.—For one party, tubercle is characterized by a special histological element; for the other, by the amorphous matter. In the first party are found Kuhn, Gluge, and especially M. Lebert, who attributes to tubercle—1st, elementary granules; 2nd, a solid amorphous blastema; 3d, characteristic cells. In crude tubercle the tuberculous globule offers irregular outlines, approaching either a spherical or an oval form; it is ordinarily irregular, angular, polyhedric, with rounded angles and corners of a diameter of 0·005 to 0·0075, approaching rarely to 0·01. According to Paget, Madden admit the reality of characterictic globules—Bennett only giving a diameter to the tuberculous globules of 0·01. According to Paget, it is formed of fatty granules, of nuclei of different aspects, and finally by veritable cells, which are only epithelial cells transformed into tuberculous cells.

Amorphous Substance.—Koestlin, of Stuttgard, Rokitansky, and M. Mandl admit that the tuberculous substance is contributed by an amorphous blastema, containing or not containing altered cells. Tubercle, according to Virchow, has no characteristic element, properly so called; the atrophied nuclei which result from the decomposition of the cells are the only elements which maintain their characteristics. According to M. Mandel, "the tuberculous substance is an amorphous mass studded with fatty molecules, finely granulated, cohering at the beginning of its existence, defluent later." The fragments of this substance presents neither determined forms nor sizes. Particular tubercular globules or corpuscules have no existence.

In the face of views and opinions so different and opposite, I shall try to give my own opinion on this, one of the most important questions in pathological anatomy.

Personal Observations and Reflections.—Tubercle in its first stage of development is constituted by a grey homogeneous substance, whitish, elastic, developed either on some isolated point of the organism, oftenest producing itself, like the disseminative inflammations (dothin-enteritis, variola), on a great

number of points at once, without being characteristic of tubercle, as of cancer and pus; that this dissemination of the pathological product may appear consecutive to a secondary process of reabsorption or to any other mode or reproduction, the simultaneous evolution of the tuberculization being evidence neither of an alteration of the blood nor of the nutritive fluid.

Tubercle does not develope itself in all the tissues nor in all the organs. Differing from pus and cancer, it never commences in the epithelial cells; it does not develope itself in the muscular tissue, nor perhaps in the nervous tissue, nor in points of the consecutive tissue, where the fibres form compact fascicula, as in the tendons, the aponeuroses, and the skin—however, these are precisely the parts of this tissue where the plasmatic cells take their greatest development. Generally we observe it in the organs where there exists a vascular network with thin sides, in connection with physiological exudation, with gaseous endosmose where from easy communication, as in the lungs, the lymphatic vessels, the follicles, and the plates of Peyer, veritable lymphatic glands flattened according to Brucke, who has observed the same globules in in their interior, as in the ganglions, the serene membranes, and finally in the kidneys and testicles.

Tubercle is rare in the liver, which, perhaps on account of the capsule of Glisson, partakes with the most part of the grape-like glands the character of being rarely attacked with this kind of lesion, without our being able to attribute to something else than the predominance of fibrous element the absence of a product which develops itself so frequently in the glands of the large intestines and the glands of Lierberkiehn, so like by the general disposition of the grape-like glands to the greatest fibrous development, as the salivary and mammary glands. In this point of view we very easily perceive a certain relation between tuberculization and the existence of a system of vessels abundantly disposed, as to their walls, for a destination either of gaseous endosmose or secretory excretion. Bennett, in England, has been struck with this relation; he considers tubercle as a product of exhalation in the parts where the vessels present the least consistence. On the other hand, Baron, in England, M. Cruveilhier and Becquerel, in France, have insisted on the relations of adhesion and proximity which exist between tubercle and the venous vascular system; relations perceptible to the eye on the meninges, since it is universally admitted at present that the tuberculous granulations of the pia mater have their seat

in the inferior cerebral veins, anterior and median, and the cerebellar; and that we may observe equally through a magnifying glass on a layer of the spleen and the cortical tissue of the kidney, which becomes very apparent when there exists at the same time pulmonary granulations and an œdema of the lungs; we may then by scraping raise veinous portions which sustain grape-like clusters of granulations manifestly adherent. Blainville regarded fat as furnished by the black blood, and exhaled through the sides of the veins. He was led to this opinion by the attentive observation of the manner in which fat is distributed in the epiploon. It is difficult not to remember the opinion of the ingenious physiologist in studying the relations with the veins of tubercles, which contain so much fatty matter. Moreover, the impermeability of tubercles to fine injections, tried in vain by MM. Natalis-Guillot and William Starck; the frequency of hæmorrhages and dropsies determined by this lesion, confirm the existence of certain relations between tubercle and the vascular system.

Let us see what the microscope reveals. The microscopists have advanced different opinions on the anatomical element which serves for the support of the tuberculous substance. According to Lebert, (*Anatomie Pathologie*,) tubercle developes itself sometimes in the intervesicular tissue, sometimes in the vesicles themselves. According to Schroeder Von der Kolk, grey tubercle is seated in the interstitial tissue of the lungs, and the yellow in the interior of the vesicles. MM. Kuss and Reinhardt place their seat in the interior of the cells. Virchow admits that tubercle developes itself equally in pathological and normal tissues, in the transitory cellular parts as well as the permanent fibrous organs. Robert Carswell holds that the free surfaces of the mucous membranes serve as the principal seat for the development of tubercle; he comprises under the name of free surfaces the bottom of the cul-de-sac of tubular glands. Finally, Mandl regards the tuberculous plasma as having the power to infiltrate itself between all the elements of the pulmonary tissue and penetrate into their intimate structure.

For more than ten years that I have examined all the aspects of the question of tuberculization, I have found no fact which permits me to doubt that tubercle may have its seat elsewhere than in the interstitial tissue of the lungs. If tubercle developes itself either in the interior of the vesicles or in the thickness of the epithelial cells, we find it in the thickness of the granulations, or in the fasciculi of the elastic

fibres which limit the pulmonary cells or the epithelial cells. Now I affirm it is never to be found thus; besides, if we transfer the question on the ground of the serous membranes which the fibrous tissue, no more plated in lobules but spread out in a membrane, the question produces itself with a solution in the most evident manner.

Preparation.—We detach with care a portion of the serous membrane covered with tuberculous granulations as slightly developed as possible, and after having extended it by the aid of pins on a small piece of cork, we submit it to dessication for some hours, taking care to mark by two lines crossing each other, traced with a fine pencil, the precise point of the granulation which, by the drying, confounds itself to the naked eye and magnifying-glass with the surrounding parts. We detach with a very sharp instrument some small bits from both sides, and it is then easy to observe that on the free side the epithelial cells present themselves with their volume and their normal transparency, whilst in carrying under the eye-piece the deeper bits we perceive by the side of the transparent spaces traversed by vessels, spaces whose opaline appearance proves the presence of tuberculous matter. These are not, moreover, ever penetrated by the vessels, which stop at their limit. It is impossible to doubt, after the preceding preparation, that tuberculous matter does not deposit itself on the extremity of the vascular branches in the simple connective tissue (tissue of Reichert), or between the connective fibrilli.

Aspect of Grey Tubercle.—Under a magnifying power of three hundred diameters, a small bit, slightly moistened, covered with an object-glass, and drawn slowly through the field of the eye-glass, offers transparent spaces, with folds simulating fibres, (connective tissue of Reichert,) very distinct fibres, on the track of which appear at distant intervals the cells recognized by Donders, and to which Weber (of Bonn) and Virchow have attached so much importance, and opaline parts corresponding to the presence of tuberculous matter. In lengthening and shortening the focus by gentle movements of the screw, we distinguish, through an opaline granulous blastema, appearances of badly-formed cells, badly circumscribed, of 0^{mm}, 002 to 0^{mm}, 003 of a milimetre, which I compare to similar dispositions which simulate cells in the homogeneous tissue of the acephalocysts, or in the sarcode of the infusoria.

If we submit the preparation for some time to the action of

pure acetic acid, the opaline parts become transparent, presenting superposed lines, simulating fibre; the cells disappear, and drops of fat can be seen swimming around the preparation, varying from 0^{mm}, 04 to 0^{mm}, 02 in diameter. The preparation resembles the aspect of albumino-fibrinous productions, less the leucocysts, and with more fatty drops. The tuberculous drops described by M. Lebert appear to me to belong to a more advanced degree of development, or of degeneration of the tuberculous matter; very charactistic, they appear as small round or oval fragments, with a nucleus, with an elevated contour, affecting an aspect which resembles somewhat the cartilaginous cells. In the tubercle, in process of softening, we find the same globules more isolated on the border of a granulated amorphous mass, containing in its thickness the same globules which we perceive by transparence in moving the eyè-piece by the screw. In giving a movement to the parts submitted to observation, we see the globules fly into other fragments, smaller or more voluminous, in such a way as to resemble very much the breaking up of the ice on the surface of a river where the movement of fragments of altered fibrine borrowed from a hematic tumor in process of decomposition takes place.

When the softening is complete, there exists in the middle of the tuberculous fragments leucocysts proceeding, as well as fragments of fibres, from the surrounding tissues.

If from the study of the lesion we seek to advance to the notion of pathological physiology, which can only end in a medical idea, it is indispensable that, conforming to the rules of the method, we should embrace at once all the characters particuler to the tubercle, in establishing what is proper to it, and what distinguishes it from other pathological products. Tubercle differs from pus, because pus has for principal element the leucocyst, which belongs to the normal life of blood; that pus, the product of a process of prolifiration, which we are able to provoke, developes itself in all the tissues and in all the organs. It differs from cancer, because cancer is organized, that it effects especially the epithelial cells, the grapiform glands, and the fibrous element of the connective tissue.

Cancer appears to attach itself in its development to a state of organic decay (old age). Tubercle seems rather connected with a state of organic evolution. Developed in the organs where there exists an abundant vascular network, it affects in its evolution a great many distinct points, realizing the path-

ological idea of the diathesis. Cancer, on the contrary, at first local, generalizes itself secondarily by a process of resorption or reproduction which resembles rather the idea of cachexia. Cancer, in so much as an organized product, carries in itself the fatal conditions of its increase and of its extension; simple tubercle, a foreign body, may remain without action in the middle of our organs, on which it does not act, moreover, but as an agent of compression or irritation. Cancer does not undergo any other influence in its march and its development than that of individual conditions. Tubercle, although appealable to predispositions of race and family, is submitted in its progress, and probably its evolution, to external modifying causes. We know how fatal the catarrhal constitutions are to tuberculous persons, and we have personally seen how much the conditions which provoke scurvy react fatally on the same patients. Laennec and M. Louis have then justly raised to the rank of disease a lesion, perfectly characterized by its mode of development, its physical aspect, and its progress, which ends either in a calcareous transformation, or in a fatty degeneration, with softening.

If it was permitted us, in our day, not to be carried away in the precise terms of a definition, and allow our thoughts to wander beyond the limits where the knowledge of the times retains us, we would say that tubercle seems to us to be produced by a state of nutritive fluid, which resembles the degree of degradation this fluid undergoes when, being no more represented by the blood, the lymph, and the serosity, which are the three aspects under which it produces itself in the superior animals, it reaches a state of being no longer constituted than by a sarcodic humor containing some plasmic cells. Finally, in every point where tubercle develops itself, the circulation is arrested, irritability is extinguished. Instead of the process of physiological activity and renovation of the parts, an inert mass constitutes itself, and absorbs the normal parts; instead of the interior movement of vital expansion, the normal product increases itself by juxtaposition, to that point, that, acting on the surrounding parts, it becomes for it a cause of destruction.—*Gaz. Hebdomadaire, Sept. 20th.—Translated by Cincinnati Lancet & Observer.*

EDITORIAL AND MISCELLANEOUS.

Ferrocyanide of Potassium.—Dr. Newcomer, in the *Lancet & Observer*, after nineteen years careful observation and experience in the use of prussiate of potash is convinced of its great value as a curative agent.

I will now give in few words the class of cases in which this medicine was first used: Invalids, the largest number females of enfeebled habits, relaxed fibre, languid digestion, flatulent, sour stomach, sleepless, and the train of varied symptoms usually attending such a state of the system. Prominent among others is pain, more or less severe, in the stomach and bowels, in the nerves of the face, forehead, etc., but more severe and constant in the head. The bowels may be regular or contrary-wise; pulse often too quick; always irritable, easily excited, and seldom regular for any length of time; hands and feet cold, or inclined to be so, etc., etc. Such cases often gave me much trouble. Anodynes might afford relief for a time, but the distress caused in other respect is often a bar to their use. Tonics would heat the system, dry the tongue, and excite fever; the usual alterative of little or no effect, and a judicious course of diet and general hygienic rules rarely persisted in long enough to secure good results.

After correcting any marked lesion of function of the liver, stomach or bowels that might exist, I would give prus. potassium, ℥ ij., ext. glycyrrhiza, grs. x. to xxx., aqua pura, ℥ ij. Dose, half to a whole teaspoonful, every three to six hours, according to the violence of the symptoms or the promptness of the remedy in relieving them. It may here be said the preparatory treatment did the work, but on this point I made many satisfactory trials, and for years past I give the potash as the first and only medicine used in the case.

Females run down from lactation often present the train of symptoms above described. To many patients in this condition two or four ounces of a solution of prus. potassium would be all the medicine given, and yet speedily cured. Some stomachs reject the glycyrrhiza, and then the formula I use is:

Prus. potassium, ʒ ij. to iv., essence pepperment, gtt. x. to xxx., aqua distillata, ℥ iv. Dose, thirty to sixty drops in elm bark or gum-arabic mucilage, and water. Some take the medicine as it is in a little water.

It is now nineteen years since I began the use of the prus. potassium, and have given it as often as any one preparation of the materia medica, and yet I do not think there was over ten or twelve persons met with who could not take on account of any unpleasant effect on the stomach, bowels or head.

Hundreds are tortured with headache, complaining of no other symptom. Eight out of ten cases of this kind I cure or greatly relieve with this salt, giving in one of the preceding formulas. Neuralgic pains of the face, head or other regions, are often promptly cured by it. In all cases of this nature, the prus. pottassium is depended on. A very intelligent lady, who had for a long time suffered much with headache, said this medicine was essentially a headache medicine, it often giving relief from a severe pain in the head in thirty to sixty minutes, without vomiting, purging, or disturbing effects.

As a stomachic or invigorator of digestion, and hence a tonic, it is in my hands oftener used than all other remedies, and with more success."

In a subsequent part of the article he remarks that he omits his observations on the article as a sedative, considering veratrum viride a more reliable article of the class.

He disclaims the idea of this medicine being a hobby with him, but invites professional examination of the claims he makes for it.

Without giving it a position in any particular class of the Materia Medica, he observes:

"It may be expected that I would class the potassium—assign it place in the materia medica. This I will leave to the next author of such a work. Yet, had I no fear of making this article too long for the editor, much might be said on this head.

I am positive the prussiate of pottasium will reduce the pulse, and is so far sedative. It excites the appetite and promotes digestion,—in some instances in a degree not reached by any other article. I use it in many cases as a tonic. In neuralgia and nervous pains of the head, face, and other parts, in "sun-pain," it will give relief; therefore it is an anodyne.

When successful in asthma, as it has been in my hands, it is antispasmodic or alterative. As a restorer of an exhausted system, from lactation or other causes, it is my most certain remedy. In chest difficulties it has done more than the chlorate of potash for me. In a large majority of neuralgic patients it is my first, my last and only medicine.

If any of our professional brethren adopt the pros. potassiom into the list of their curative agents, I would like at a future period to hear from them, whatever may be their conclusions. I know that men in our profession have their pets or hobby, to which they ascribe virtues that no one else can verify—as Hamilton with purgatives, and a hundred other instances could be found; and I really curious to know how much of all the varied qualities assigned the prus. pottasium in this article will be found by others. No one could be more careful than myself, and nineteen years seems to be time enough to establish a truth in therapeutics."

Cut and Thrust Wounds in the Intestinal Canal.—Dr. B. Weber, in the same journal, after observation and large experience from 1812, says: "All hitherto recommended methods of operation and manipulation to heal wounds of the intestines can not only be entirely dispensed with, but since they do not further the object of healing, they are rather impeding it, and consequently objectionable."

He asserts that unless the intestine be entirely severed all wounds are immediately closed by its muscular fibres. The object of treatment is to prolong the stage of simple exudation of coagulable lymph until its organization, a period seldom beyond eight or ten days. He directs, therefore, closure of the external wound by sutures, if necessary, to prevent escape of the intestines, and then assiduous application of cold, by cloths frequently wrung out of ice water, by bladders of pounded ice or snow, or, in the absence of these, Schmucker's or other freezing mixtures.

Venesection in plethoric habits. Enemata of mild character, to secure evacuation of the bowels, and generally the antiphlogistic regimen. He observes:

"If the intestinal canal is entirely severed transversely, if

necessary, enlarge the external abdominal wound, and try to bring the eed of the intestinal canal attached to the stomach into the intestinal wound, where it can be fastened by a loop fastened in the mesenteries. The pressure of the intestines generally favors its remaining in place. It is to be particularly taken care that the external serous membrane of the intestinal canal be brought in contact with the edges of the wound of the abdominal integuments, since the inner mucous membrane is unfit for exudation of plastic lymph. By resorting to the above mode of treatment, the worst that can happen is an artificial anus, since by application of a loop to the mesentery the edge of the lower end of the intestine by attraction is brought in contact with the lumen of the upper end, and sometimes a perfect union of both ends is accomplished, and the alvine evacuation which for a period took place unnaturally through the abdominal wound, is going on in a natural way, and the abdominal wound finally will close entirely.

For the latter case I can bring proof in a person treated by me many years ago, in Germany, who is now living in Cincinnati."

Test for Diabetic Sugar.—Dr. Wm. Roberts, of the Manchester Royal Infirmary, publishes in the Edinburgh Medical Journal a simple clinical method of estimating the amount of sugar in diabetic urine. It is exceedingly plain and satisfactory. The method will be appreciated at once by a quotation of brief extent:

"The only instrument needed is the urinometer (with the use of which every practitioner is familiar) and two phials, one of twelve ounces, and the other of four. The principle of the test is most simple. *It is to take the specific gravity of the urine before and after fermentation, and from the loss of density occasioned by the conversion of sugar into carbonic acid and alcohol, to calculate the amount of sugar destroyed.*" A lump of German yeast of the size of a small walnut is added to say four ounces of urine in a twelve ounce phial. This is loosely corked or covered with a slip of glass and allowed to stand twenty-four hours, when the process under the ordinary temperature of living apartments will be complete.

A similar quantity of the urine which has had no yeast added to it, may be kept side by side, and then the density of the two observed. "The difference between the two densities is thus ascertained, and every degree of density lost, indicates one grain per fluid ounce of sugar in the urine."

The practical details are obvious.

Holloway's Pills.—The formula for this much be-advertised nostrum is, ℞—Aloes grs. lxii; Pulv. Rhei, gr. xxvj; Piperis, gr. viij; Croci, gr. iij; Sodae Sulphat. gr. iij. Ft. massa in pil. cxliv divid.

American Surgery Abroad.—The American Medical Monthly welcomes the return of Dr. Sims from Europe.

"He has had," says the Monthly, "an opportunity, and a deserved one, of establishing in the eyes of scientific men in Europe his right to be considered the originator of a mode of operation which, even in the brief space of time since he first promulgated it, has been of immense benefit to suffering humanity, and of which the most persistent and unwarrantable efforts have been made to deprive him. His reception in Paris was most gratifying—not only was he called upon to operate before crowded classes in five of the largest hospitals of that city, but the most eminent surgeons confided their private patients to his professional skill. Fourteen cases, only four of which were not *unusually bad*, and fourteen cures! Such is the brief record of his labors in the Capital of the Medical World. We doubt if a similar score had ever been run up there before. 'I was certainly very lucky,' says the doctor modestly. The one of us who has had the most experience, will probably be best able to estimate the 'luck' at its true value. The *Times*—not the English Blood and Thunder Warsheet, but its more peaceably-inclined namesake on this side the water—recently contained a letter from its special correspondent in Paris, which was almost entirely devoted to the consideration of Dr. Sims' visit and success. He mentions a case which possesses considerable interest in view of the question of the employment of anæsthetics, which has recently been brought so prominently before the profession in this city.

"It was that of a young Countess, whose case had been pronounced hopeless by the leading surgeons, and who was

placed under his care by Nelaton. A feature of the operation was her narrow escape from death by chloroform. The method adopted for the restoration was both novel and rational, and we are told that it is now generally followed in similar cases in that city. It consisted in "throwing the head of the patient down, and the feet in the air at an angle of abont forty-five degrees. By this manœuvre, the brain and heart, with an increased quantity, receive an increased amount of stimulus, from the blood, and life is preserved until the volatile poison has spent its force, and is dissipated.' The ordinary measures, friction, artificial respiration, and evulsion of the tongue, were also practiced."

Dysentery.—Dr. Aug. Baudon, in the Bulletin General de Therapeutique, chronicles successful treatment of "a dozen very severe cases of dysentery, characterized by tenesmus, prolapsus ani, bloody stools, 20, 30 to 40 a day, and extreme prostration by the exhibition of the solution of perchloride of iron." He employed also two or three warm water enemata daily, containing from 12 to 25 drops of the solution, with the addition of laudanum if pain was excessive. Duration of disease from four to eight days.

Indian Remedy for Small Pox.—Herbert Miles, M. D., a Surgeon in the British army, states that the Indians in Nova Scotia employ with very marked advantage an infusion of *Sarracenia Purpurea* (pitcher plant). The effect of a large wineglassful is to bring out the eruption freely. "After a second and third dose, given at intervals of from four to six hours, the pustules subside, apparently loosing their vitality. The patient feels better, at the end of each dose, and in the graphic expression of the *micmac*, knows there is a great change within him at once. In a subject already covered with the eruption of small-pox in the early stage, a dose or two will dissipate the pustules and subdue the febrile symptoms. The urine, from being scanty and high-colored, becomes pale and abundant, whilst from the first dose the feelings of the patient assure him that the medicine is killing the disease."

The constitutional symptoms subside in three or four days, although, as a precautionary measure, patients are kept quiet until the ninth day. It is alleged that no pitting or discoloration follows. The Indians regard it moreover as a preventive and antidote, and drink the weak infusion during the prevalence of the disease.

Irritable Bladder.—An infusion (ounce to pint) of Triticum Repens is extolled in irritable conditions of the bladder, whether from inflammation, gonorrhœa, calculus, or obscure diseases. It is asserted to be much preferable to buchu. The plant should be gathered in the Spring, shortly before the leaves appear. Improvement, if produced at all, will be immediate. If none can be observed in four or five days, it is useless to continue the remedy.

Otalgia.—The *Gazette Medicale de Lyon* recommends in severe earache, when other remedies have failed, equal parts of chloroform and laudanum introduced to the meatus on a piece of cotton. "The first effect produced is a sensation of cold, then there is a numbness, followed by scarcely perceptible pain and refreshing sleep." This is not novel, but good.

Researches on the Changes undergone by Cane Sugar in the Intestinal Canal.—Dr. Kœbner has investigated this subject, and the following are his conclusions:—1. Cane sugar undergoes no change when left from two to four days, at 104° Fah., in natural gastric juice obtained from a dog. 2. Neither is cane transformed into grape sugar in the living stomach. 3. Lactic acid may, after a time, be detected in a mixture of cane sugar, by means of bile which has been freed from mucus. 4. In the ileum cane is transformed into fruit sugar, at least the presence of the latter can be detected in the ileum by means of the polarizing apparatus. 5. Sugar is largely absorbed by the stomach, duodenum, and small intestines. 6. Cane sugar is partly transformed in the latter into lactic acid and fruit sugar. 7. In dogs and rabbits cane sugar occasionally passes unchanged from the intestines into the portal blood, and this probably is the reason why dogs fed on sugar excrete a small-

er quantity of urea. 8. Cane sugar, even when eaten in quantity (by dogs), does not reappear in the urine: but after a saccharine diet, the amount of uric acid appears to be increased. —*N. Syd. Soc. Year Book*, 1860.

On the Formation of Sugar and Amyloid Substance in the Animal Economy.—Dr. R. McDonnell puts the question—Is the liver endowed with the power of converting amyloid substance into sugar during life, and health? In order to elucidate this question, he withdrew, by means of a catheter, blood from the right side of the heart in the living animal, and the results were—

1st. In twelve experiments made on dogs, for some weeks before fed exclusively on meat, traces of sugar were found in the blood of five; there was no sugar found in the blood of the remaining seven.

2d. In four rabbits fed on boiled eggs, meat and butter, for some days, no sugar was detected in the blood drawn from the right side of the heart.

3d. In three dogs, fed on mixed diet, and three rabbits, fed on carrots, potatoes, etc., sugar was found in the blood of the right side of the heart, and in equal quantity in blood from the carotid.

4th. In three rabbits, fed on vegetables, sugar was found in the blood withdrawn during life from the right side of the heart; but double, and in one instance more than treble, the amount was in the blood removed from the same locality after the animals were killed.

Hence, says McDonnell, one seems in some degree justified in concluding that in vegetable-eating animals the blood is normally saccharine; but that the liver does not form and pour out into the blood of the hepatic vessels sugar specially derived from the transformation of the amyloid substance.—*Ibid.*, from *Dublin Hosp. Gaz.*, May 15.

Chorea Dependent on Dental Irritation.—Dr. J. J. Levick, in *Am. Jour. Med. Sci.*, recalls attention to the frequent dependence of chorea upon the irritation of dentition or of carious teeth. Many cases appearing about the period of second dentition may be relieved by lancing the gums or drawing the first teeth. The same rule holds with reference to carious teeth.

Sulphuret of Lime is recommended by Dr. LAVAN, in *Championner's Journal*, to promote the regeneration of the substance of bone. He was led to its use by observing the enlargement of the joints of the fingers of those who used this agent diluted in olive oil in frictions for scabies. He has for many years prescribed frictions with sulphuret of lime on the heads of ricketty children where the fontanelles were excessively large or remained open abnormally. He deems it similarly efficacious in facilitating reproduction of bone in fractures, exsections, &c. In rickets he found it to act with "surprising rapidity."

Chlorate of Potash again.—Dr. S. H. SMITH, of New York, in the *Am. Med. Times*, believes that the greatest value of the Chlorate of Potash is as a prophylactic. Given with *Quinine and aperients*, he has seen it repeatedly stave off attacks of epidemic fevers. So also it is "a big thing" in that state of constitution favoring boils, felons, whitlows and carbuncles. He, moreover, conceives it to have acted miraculously in certain mental diseases, associated with an unusual lividity and coldness of the lips, extremities, and sometimes tip of the nose, showing an embarrassed capillary circulation, perhaps ascribable to some morbid condition of the circulating fluid itself.

It is evident that Dr. Smith believes that Chlorate of Potash is a power in the medical Israel. He will recover.

POISONING BY IODIDE OF POTASSIUM.—A man, thirty-eight years old, who had been suffering from sciatic rheumatism for one year and a half, but who was in other respects healthy, took from an unprofessional person a mixture consisting of two drachms of iodide of potassium, four ounces of water, and one ounce of syrup, in doses of one tablespoonful every half-hour. In the whole thirty-six grains of the iodide were taken. After the second dose symptoms of poisoning commenced and continued to increase during three hours, when the patient presented the following conditions. His head was hot, his face puffed, his eyes swollen, sunken, and very sensitive to light.

The submaxillary region was swollen, there was great restlessness, singing in the head, sharp pains in the head, and great exudation of mucus and saliva from the mouth; there was no particular smell perceptible from the mouth; the inclination was for sickness, but there was no pain in the lower portion of the body. In the circulatory system there was nothing abnormal. As a drink, starch flour was ordered in water, vomiting was induced by the process of tickling the fauces, leeches were applied to the temples and to the back of the ears, and cold cloths were put to the head. In twelve hours the pains ceased, and in forty-eight hours the flow of saliva, the symptoms of swelling, and the other signs of poisoning had vanished.

Clarus, who narrates this case from the 'Nass. Med. Jahrb., p. 747.' 1861, where it is recorded by Dr. Orth, remarks upon it that it is one of interest, because the symptoms called forth by the iodine were pure, and were not interfered with by the symptoms arising from any other disease; because no general symptom of disease was exhibited except nausea; and lately, because the symptoms induced followed so small a dose as thirty-six grains of the salt, in a strong, young, and not oversensitive man.—*Schmidt's Jahrbucher*, Band, iii., Jahrgang 1861.—*Drug. Circular.*

Quinine and Veratria in Typhoid Fever.—Vogt, on comparison of tabulated cases, prefers veratria to quina in the treatment of typhoid fever. The medical mutiplication table was seemingly never more improperly invoked, as the two articles have nothing in common, and are adapted to almost totally different cases. Of three cases of typhoid fever, side by side, one might be benefitted by the veratria, the next by quina, and the third seriously injured by either. Such observations as those of Dr. Vogt's must injure the profession in the view of truly scientific thinkers.

The Letheon Patent.—Dr. W. T. G. Morton having instituted a suit under his patent for the use of Ether as an anæsthetic, against the N. Y. Eye Infirmery, the presiding Judge (Shipman), after hearing considerable testimony, having come to the conclusion that the patent was void, and

moreover the subject matter was not patentable, directed the jury to find a verdict for the defendants.

Where will the indefatigable W. T. G. M. "turn up" next? Nevertheless, in justice to Boston, if not to W. T. G. M., it must be admitted that anæsthesia, as a practical thing, was born in that city—W. T. G. M. being accoucheur in chief, Prof. Jackson counsel (or rather accessory after the fact), and our venerable confrere, the *Bost. Med. Journal*, the first to chronicle the event.

Homœopathy in the Army.—The subjoined terse resolutions were prepared by Dr. Valentine Mott, and at his suggestion adopted by the Academy, although "the Napoleon of American Surgeons" was not himself present, in consequence of an unlucky fracture of a metacarpal bone, which latter we earnestly trust will not permanently interfere with the surgical ambidexterity of the professional veteran.

"*Whereas:* Petitions have lately been presented to the Senate and House of Representatives of the United States, for the employment of homœopathists as surgeons in the Army; therefore,

Resolved, That the New York Academy of Medicine deem it their duty in the interest of the Army, respectfully to protest against the employment of such practitioners, for the following reasons:—

"1st. That the practice wherever subjected to accurate observation has failed to establish itself in any hospital.

"2d. That in the countries where it originated and attained its fullest degrees of development, it has not been introduced into the army or navy.

"3d. That it is no more worthy of such introduction than other kindred methods of practice as closely allied to quackery.

"4th. That such appointments would dissatisfy and dishearten the Medical Staff of the Army, who understand the true character of homœopathy, and who have entered the service of their country, with confidence that the government would strive to elevate the standard and promote the efficiency of the Medical Staff—results surely to be defeated by the appointment of homœopathists.

"*Resolved*, That a copy of the above resolutions be sent to

the Hon. Ira Harris of the U. S. Senate, and the Hon. F. A. Conkling of the House of Representatives, with a request that the resolutions be presented to the two houses of Congress."

The Citro-Ammoniacal Pyro-Phosphate of Iron.—Prof. E. N. Chapman, of Brooklyn, in an elaborate article in the *Bost. Med. Journal* recommends the (briefly) Pyro-Phosphate of Iron as tasteless, elegant in appearance, and unlikely to disagree with the most delicate stomach. In addition to the full powers of the chalybeates, it affords new virtues giving "this special compound advantages possessed by none other in the Materia Medica. This arises from the pyro-phosphoric-acid." The large physiological importance of phosphorus as an element especially of the great ganglionic centres; the part it plays in cytogenesis; its general presence in all the solids and fluids of the body; its thereapeutic powers as a cerebral stimulant and aphrodisiac—are severally alluded to, and defect in its reception or assimilation considered as morbific.

Prof. Chapman thinks the presence of Phosphoric acid and elemental phosphorus communicates especial value to cod liver oil; that the combination, as in many other cases, gives an article possessed of new and superior powers.

But, he observes, the liberation of phosphorus in the oil by the processes of life will be slight compared with that set free in the blood by pyrophosphate of iron; since the iron is immediately assimilated and appropriated in the processes of nutrition by the red globules of the blood.

"Hence we discover the reason why the oil will augment the deposition of the fat, and, when oxidized, will augment the activity of all the various functions, and why the stimulation from this oil is far less than that from the pyrophosphate of iron. Thus these two medicines afford a means of introducing phosphorus and its acid into the system, a point otherwise difficult to be attained; and secure certain peculiar medicinal results through the nature of their combinations.

Practical, clinical facts, the only reliable foundation for

medical practice, confirm, in my experience, the views thus presented on a therapeutical and physiological basis.

We have employed the citro-ammoniacal pyrophosphate of iron, in certain conditions, with the most marked and gratifying results.

Whenever the blood becomes thin and watery, there are, almost invariably, troublesome attendant symptoms, seriously retarding the restoration of the patient to health. In all, there will be a lack of nerve-power, from the hydræmic state of the circulation. Hence, could we, temporarily, augment the stimulating properties of the blood, whilst we are administering the iron, we should prepare the way and present the conditions required for its assimilation, which otherwise might be impossible. Experience has taught most physicians this practical fact, and the indications have usually been fulfilled by the simultaneous use of wine and iron. We have found the pyrophosphate singularly appropriate under these circumstances, and as superior as a natural excitant must ever be over any substitute we may devise. Persons who have been over-worked by mental application and prostrated by disquietude and care, or persons who have a shattered nerve-power from some constant source of bodily suffering, have a thousand anomalous symptoms dependent on an imperfectly generated and distributed nerve-power—such as wakefulness, trembling spasmodic movements, palpitations, &c. For this class of symptoms, the pyrophosphate of iron often affords relief in two or three days; and thus prepares the way for the ultimate cure that may be expected from the martial salts. Many times, patients have expressed wonder at the calming and tranquillizing effects of the medicine; not only in mere functional aberrations and irregularities, but also in cases where actual disease existed in the nerve-centres. In both instances, the stimulation is immediate and transient, and can be of no avail, except by removing irregular nervous distribution; whilst the iron is appropriated more readily by the organic forces now freed from a great source of disorder.

After detailing several cases illustrative of the therapeutic power of the agent he adds:

"For all the varied and anomalous symptoms of hysterical patients, which are usually some phase of irregular distribution of the nervous influence, the pyro-phosphate acts with singular efficiency; diffusing and equalizing the nerve-power, and thus secondarily restoring a more active capillary circula-

tion and a more healthful play of all the functions. Cases illustrative of this point are unnecessary in the milder forms of nervous disease, since the claims of our remedy are sufficiently vindicated in the severer ones hitherto mentioned.

The pyrophosphate of iron has another property scarcely to be expected, and one we should never discover except by actual observation. All of the common preparations of iron are apt to oppress the stomach, coat the tongue and destroy the appetite, especially when the patient is much debilitated. Many, from a delicate, sensitive organization, cannot, under any circumstances, take iron with profit, it being, in their language, too heating. The pyrophosphate is friendly to the stomach, will never cause any irritation of the gastric surfaces, and, to our knowledge, has never disagreed with any patient, however incompatible the other forms may have been. Besides, it appears to possess a tonic power, and will restore the appetite and digestion after the failure of bitters, quinine, wine, &c., often in extreme cases of anæmia, amenorrhœa and chlorosis, as we have witnessed in many instances in our obstetric clinique. It seemed to afford just the grade of stimulus required by the stomach, and the improvement, thus initiated, continued without interruption, under this single remedy, to the complete cure of the patient. This acceptability, friendliness, corrigent and roborant action of this form of iron on the digestive organs is a valuable peculiarity which renders it, in many states of disease, superior to all others, and perhaps to any drug whatsoever. Besides, its tastelessness, when dissolved in syrup, is a great recommendation in this age of sugar, when patients desire to die *sweetly*, and will not endure anything nauseous or unpleasant, though death be knocking at the door. This we might expect in children who *bring* up their parents to a tolerably high state of discipline, and issue their orders of command from the cabinet councils of the nursery. We, medical men, taking the world as we find it, are obliged to render our doses as palatable as possible for babies, both great and small. This object, without detriment in the choice of our means, is singularly and notably attained by the use of the syrup of the pyrophosphate of iron."

Religious Excitement.—The Irish Lunatic Asylum at Ulster chronicles a large increase of accessions consequent upon two months of general protracted religious excitement. It is assigned as the cause of insanity in 97 males and 86 females.

Prof. Dixi Crosby, of New Hampshire, has been nominated to the highly important office of Railroad Commissioner for that State. This is a compliment of a high order to a most estimable and deserving man, more peculiarly grateful as the nomination was given by political opponents as well as friends, Dr. Crosby not belonging to the dominant party of the State.

Deaths of Distinguished Medical Men.—Thos. Southwood Smith, M. D., died on the 10th December last, at Florence, where he had been recently sojourning for the benefit of his health. The name of Soutwood Smith is familiar to the profession and the public largely, from his labors and success in sanitary reforms. He had reached the age of 73.

Sir John Cæsar Hawkins died November 9th, 1861, aged 89.

Dr. Cathcart Lee, of Dublin, December 16th, aged 50.

Administration of Chloroform.—Dr. Simpson, the introducer of chloroform as an anæsthetic, now recommends that a single layer of handkerchief be laid over the patient's face, and to let the chloroform fall on it drop by drop. It is claimed that there is less danger, a more speedy effect, and that a less quantity is required. Dr. Young stated that he kept a patient narcotized ten hours with two ounces and a-half.

Application of Arsenic to Carious Teeth.—G. W. Ellis, M. D., in the *Dental Cosmos*, states that arsenic is now the almost universally adopted medium for the destruction of the dental, and, in skilful hands, is thought to be divested of the many dangers which have been attributed to it. It appears that the most usual practice is to rub up the arsenic with kreosote and sulph. morphiæ. The value of the addition of morphia is much debated, but the weight of testimony is in its favor. The amount of arsenic employed varies from the twentieth to the fortieth of a grain, and the duration of the application varies from three to forty-eight hours, depending on the susceptibilities and peculiarities of each individual case. Dr.

Harris recommends it to be left in "about seven hours, or two hours after the tooth has completely ceased aching."

If, on the removal of the arsenic, the part be still sensitive, the renewal of the application is the practice mostly advocated.

Local Anæsthesia.—M. Fournier addresses the Academy of Sciences (Paris) on "Chloracetization." At the temperature of 63° Fah., he mixes equal parts of pure crystallizable acetic acid and chloroform, and by means of a wide-mouthed (or narrow, as the case requires,) applies it upon the surface where the epidermis is unbroken, and the phial being kept at the temperature of the hand, complete anæsthesia of the part will soon be induced. He suggests modifications of this process in cases where general anæsthesia is deemed inadmissible.

Diagnosis of Parotitis and Phlegmon of the Face.—M. Trousseau recommends a method of distinction suggested by M. Archambault. Causing the patient to open the mouth widely so as to expose the mouth of Steno's duct by pressure of the parotid, a drop of pus can be expressed if the gland is the part affected. The process seems infallible in differential diagnosis.

The Poison of Continued Fever.—In a recent clinical lecture, Dr. Thomas K. Chambers remarked that he is "inclined to think that the usual path by which the poison enters, is the digestive canal. It is mixed with the saliva and carried down to the stomach, where it possibly may accumulate and be multiplied in the gastric mucus. During severe epidemics, it has been observed that those who smoke, that is, stop up their mouths with tobacco, and spit out the saliva instead of swallowing it, are less liable to be attacked. And in an early stage, even after the poison has begun to act upon the system, the fever may be arrested by emptying the stomach. Those who have watched my practice will have seen several instances of the success of this treatment, the fever cut short and conval-

escence entered upon immediately with its painless debility and emaciation gradually passing away."

Dr. Chambers, from careful analysis of urine in patients prior to and subsequent to the administration of an emetic, concludes that this remedial agency is capable of removing an essential part of the disease, even when the pathognomonic group of symptoms is present.

Before the emetic, the urine gave the usual evidences of destructive metamorphosis of tissue; after it the destruction is overcome by renewal. When this occurs so constantly as the result of a single dose, he finds it difficult to avoid the conclusion that it acts by removing from the mucous membrane a poison only partially absorbed and still adherent to it.

The strong resemblance between the incipient phenomena of continued fever, and those attending the ingestion of unwholesome material, is also cited. Again, the spontaneous vomiting, so very generally found in the first stage of the fever, seems to offer a presumption that the organ first impressed by the poison is the first to resent it.

The successful use of emetics which Dr. C. found to tally so exactly with his theory, unfortunately has not been realized by physicians generally, although emetics have long been held useful by them in the outset of continued fevers. We are inclined to the opinion that the effect of the substances given as emetics, has transcended the merely mechanical unloading of the stomach. Their generally relaxing and sedative character and the powerful influence they exert both through the sanguineous and nervous systems better explain to us their frequently efficient service. It seems more than likely that the emetic effect is only accidental and not necessary to the really valuable effect, any more than salivation is necessary to secure the alterant impression of mercury. However, upon this point there may be much said on both sides.

The effect of the poison received within the system is so graphically described, that we will present it.

"When the poison has once gained admission and is diffused

by means of the circulation through the system, its effect is to destroy the vitality of a considerable amount of the organic living matter with which it comes in contact. The destruction is interstitial, not local—I mean, it does not kill absolutely a certain spot which it touches, like sulphuric acid, but it kills only certain constituents of the tissues. The destruction is partial, not entire—the organic matter is not utterly disorganized, but only reduced to a less vital, less organic condition. It may be traced easiest in the alterations found in the medium by which it is diffused. The blood, the common thoroughfare for distribution of good and evil to the tissues, exhibits a serious change. If you examine it under the microscope, you will find that the normally shaped red disks are diminished in numbers as compared with what Pathologists call "melanosed" corpuscles, that is to say, dying or dead disks, shrivelled and small, of a dark color, with black specks in them, and with gimped edges. In bad cases these are unable to range themselves in rolls, as healthy blood does when it coagulates; they seem to have scarce any attraction for one another, and lie in amorphous heaps. They dissolve easily in the serum and form with it a red fluid. You may trace this dissolution in the dusky stain which the blood communicates to the skin in low fever.

"This poisoning goes on very gradually in some cases, and apparently quicker in others. You heard from this boy that he was five weeks ailing before he gave up work. There was an imperfect renewal of the body, evidenced in the languor after exertion and in the loss of appetite or deficient demand for new material by the formative processes. But destructive assimilation is not arrested, there is no stop to the removal of the effete tissues by excretion. I think it is possible that in a great many cases the disease, the partial death, may stop here, the destroyed tissues and their destroyer together be disorganized, be reduced to their elements and pass away. The idea is incapable of proof, but it would account for a vast number of those mysterious languors, unqualified, unnamed, and often unpitied, which distress patients and puzzle Doctors. However, when the poisoning has reached a certain pitch, the nervous system cannot but take notice thereof, and express itself in the most common mode of taking notice of partial death, namely, by a shivering fit. Any severe injury to the body, a stretching of fibrous tissues, an operation, the fear of an operation, the absorption of destructive drugs, such as antimony, for example, will cause more or less of a rigor in pro-

portion to the sensitiveness of the individual. And thus also when an interstitial death of some constituents of the body arrives at a certain point, there is a rigor. This rigor recurs from time to time at uncertain intervals, but generally about once a day.

"Then commences another symptom of partial death—pain. This boy described his head, his limbs, and his back as aching all at once. That is to say, wherever there was most tissue with sensitive nerves in it, there was pain, indicating the diseased state of that tissue. Now all this aching is a symptom of the earlier, rather than of the more advanced stages of fever; not because there is latterly less death, but because the nervous system becomes partially dead too, and does not feel so acutely.

"Observe that this patient tells us of nausea and loss of appetite, which diminished the food eaten—of vomiting, which rejected the greater part of that diminished food—and of diarrhœa, which carried off the remainder scarce digested at all. Yet in spite of this, the amount of solid matter passed from the kidneys is considerable; the specific gravity of the fifteen ounces of urine passed in the twenty-four hours is 1020. The metamorphosis, therefore, of the dead effete tissues into urea and salts is quite as active as in health. There is a continuous destruction of them in spite of the defective supply. This goes on as long as the fever poison lasts in the body, but when it is got rid of, the destruction ceases, no more is metamorphosed than is required to make room for new material, and the specific gravity of the urine falls during convalescence. This may take place very suddenly, as in the instance I gave you of a fever cut short by an emetic; but in general the alteration is more gradual.

"I have mentioned the large amount of urea in proportion to the nutrition in the urine of continued fever, which is rendered evident by its high specific gravity. There is also an increase very evident to the naked eye in another constituent of some importance, the colored organic material, which gives the secretion its ordinary hue. You saw how dark this boy's water was, and how deeply it stained the vessel from which I poured it on a piece of linen. There is great reason to suppose there is a close alliance between this substance and whatever gives the red tint to the blood-disks, and that its excess depends on excessive destruction of those important little living particles."

He observes that the sulphates and phosphates as also the chlorides of the urine are diminished.

The diarrhœa and exuded sanguineous serum drying upon the brown or livid tongue are further evidences of the interstitial decay and death. So also is the increased heat—the natural result of the chemical changes incident to the heightened rapidity of tissue metamorphosis.

The *materies morbi* is not the disease any more than the bullet which passes through the soldier's chest, or is extracted by the surgeon, is the disease which ensues. It is the partial death which has resulted which is the object of treatment. The physician is to enquire "What vitality is wanting, and where? What material is wanting, and where? And, How can I easiest supply them?"

The methods are obvious. First, remove the materies morbi so far as it may be reached. Second, supply moisture to the dry and heated surface. Third, supply nitrogenous food. Fourth, turn attention to the materia medica—and here, from theoretical considerations, but more especially as confirmed in value by practical experience, Dr. Chambers relies mainly upon free exhibition of dilute hydrochloric acid. He does not rank alcohol as part of the systematic *methodus medendi* of continued fever, but only as an adjuvant to the restorative treatment he advocates. "If there is very complete prostration, delirium of a low muttering character, it is required. A tremulous state of the muscles, marked especially by a quivering of the hands and figures, is a good test for the necessity of it; and so is a sharp, weak, unequal beat of the heart." Under these indications, the positive anæsthetic power of large doses of alcohol may be demanded.

Strangely enough, Dr. C. still adheres to the opinion that local bloodletting is advisable in the so called complications of typhoid.

The concluding words of this valuable lecture correspond so exactly with opinions we have long been in the habit of in-

culcating to students, that we quote them with unmixed pleasure:

"The moral of these cases is, do all you can to increase the appetite. Judge of the value of this drug and that drug, this tonic and that tonic, solely by the effect it has on the desire for food. If any remedy lessen this, insist upon leaving it off, whatever authorities may have recommended it; and form your judgment, not from tradition or prescription, but from its action in the individual case before you."

Pertussis.—Nitric acid is being revived as a remedy for whooping cough. Dr. H. Holmes, M. D. in a paper read before the Middlesex (Mass.) Med. Society (Bost. Med. Jour.) recommends the following: ℞ Tr. Cardamomi Comp. ℥ ss; Syrup. Simpl., ℥ iiiss., Acid. Nitrici, gtt. xxxij. M.; S. From five drops to one teaspoonful to be given frequently, according to the age of the patient, and the severity and frequency of the paroxysms.

Evils of bad Drainage.—It appears, from the investigations which have been made, that the cause of the lamented death of Prince Albert is traceable to the imperfect drainage and defective sanitary arrangements *in the neighborhood*, although not directly upon the site of the royal residence. Typhoid diseases are eminently the creatures of bad air, and in preventing this whatever precautions are taken must be not merely local but general and pervading. Not dependent on private caprice but public law.

Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. From the battle of Rolica in 1808 to that of Waterloo in 1815; with additions relating to those in the Crimea in 1854 and 1855. Showing the improvements made during and since that period in the great art and science of surgery on all the subjects to which they relate. Revised to October 1855. By G. J. Guthrie, F. R. S. Sixth Edition. Philadelphia: J. B. Lippincott &

Co. 1862. Pp. 614 small octavo. For sale by S. C. Griggs & Co., Lake-st., Chicago.

It is safe to say that no other living man has had so wide a range of experience in military surgery as the author of this work. There is scarcely another living name so familiar to the ears of surgeons as his.

With the exception of Baron Larrey, there is perhaps no other name so intimately associated with military surgery as a speciality. And yet Surgeon Guthrie distinctly denies that "Surgery admits of any such distinctions." It is remarkable that Dr. Guthrie's second and extended course of lectures, on which the treatise before us is based, was distinctly recognized by the council of the Royal College of Surgeons as a course on General Surgery, and thus this book is particularly valuable as it contributes to general surgery the information derived by scientific observation of that particular class of casualties to which soldiers are exposed. He who is competent to be a civil surgeon is competent to be a military surgeon, and *vice versa*. The disciplined and scientific accountant can keep the books of a retail dry goods store or those of a government bureau, with equal facility after a few hours inspection. The same remark might be made with regard to diseases; the physician who is thoroughly competent to treat the diseases of one section, can full as easily treat those of another section; those of the camp as well as those of civil life.

We do not set out to praise or compliment this volume of Mr. Guthrie's, for we deem it unnecessary to "carry coals to Newcastle." We would only suggest that it is a book equally as valuable to the surgeon in civil life as to the military surgeon, and we know of no other surgical work which, in as limited space, conveys so vast an amount of inestimable information. It is not a catch-penny thrown upon the war market, but one which will be ranked with the text books and classics of professional literature.

Excessive Lochial Discharge.—"Well, then, you have a feeble, anæmic patient, and the lochial discharge continues profuse and of bright color, six or eight days after labor. You find the uterus remaining above the pubes, nearly as large as a child's head. You give her ergot, as I before described, and, in addition, you make a prescription something like the following: ℞, Quiniæ Sulph. ʒj; Ferri Sulph. gr. xij; Ext. Nucis Vomic., Pulv. Capsici aa gr. vj. M. Ft. pil (argent) No. 12. S. One three times a day, directly after eating. Now ask yourselves what is the object of the quinine, the iron, the nux vomica, the capsicum? I have seen, quite frequently, this condition associated with a very profuse lactation, which is an additional drain upon the system, and the patient is nervous, irritable, and suffers from headache and insomnia. Now, what advantage will you obtain by adding to the above formula four grains of opium?"

Thus says Prof. B. Fordyce Barker, in a recent clinical lecture; and beyond the useful prescription contained, the paragraph suggests an idea worthy of assimilation. Medicinal formulas are very convenient for routine practitioners, but their use endangers the overlooking of the peculiar points of individual cases.

Unfortunately, notwithstanding the deserved ridicule which has been thrown upon excessively complex medical combinations, examination of any apothecary's book will show that polypharmacy is still a prevailing vice. Some of it springs from imitation of English apothecary practice, where the practitioner, not having a legal claim for his advice, finds it necessary to secure his honorarium through a diversity of prescriptions.

Some of it finds its origin in a weak affectation of wisdom, which is supposed to be at its culminating point in a recipe, multitudinous in composition, and appropriately contracted in professional Latin. We have known many such heterogenous conglomerations, pointed out by the admiring patrons of an aspiring physician, as the most thoroughly incontrovertible

evidence of his exceeding wisdom. Some of it has descended from the fathers, and we hesitate to banish it, as we hesitate to burn the worthless heirlooms which fill our old garrets.

Some of it arises from the uncertainty existing in the practitioner's own mind about what is best to do, and he means *to hit somewhere.*

Some of it finds birth in consultations—the creature of compromise. Who has not seen it?

Some of it comes from—but we forbear as the subject grows upon us. Meanwhile we commend Prof. Barker's hint to general consideration.

A Medico-Legal Point.—Prof. Alonzo Clark, commenting on a recent case of suspected homicide, states that it is "safe to infer that neither blood nor bloody effusion in the pleuritic cavities is ever the direct result of suspended respiration, no matter how produced; that when such effusion is found, except when attended by laceration of the lung through violence, it is always either a pathological condition and attended by particular symptoms during life, or a post mortem result that may be considered in the light of a drainage. Even in drowned persons, in whom it is most frequently met with, there is no evidence that it is ever observed till after days, and many times weeks, have elapsed."

This is a point of considerable importance, and may be considered as thoroughly settled. Nevertheless, we have known several cases in which this bloody effusion in the pleural cavity was thought conclusive evidence of infanticide. The person may have been murdered, but this circumstance is evidence only of ante-mortem disease or post-mortem decomposition.

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"Want of time alone prevents us from giving a lengthy critical review of this volume. We do not, however, greatly regret this circumstance, for neither the work nor the profession require much said about it. It seems to have inspired an attachment which nothing but individual possession can satisfy. To praise seems somewhat like recounting the virtues of a 'sweetheart' to her lover. Our exchanges vie with each other in expressions of admiration. The greatest fault we can find with the book, is not that any portion of it is bad, but

that some part are so superlatively excellent, that even the brilliancy of others is obscured. Hereafter, whether as student or practitioner, the obstetrician will need no other book, as instructor, guide or authority, than Bedford's 'Principles and Practice.'"—*N. Y. American Monthly.*

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"We approach the examination of this new work by Dr. Bedford, with something of the same feelings that we cut the leaves of a new novel from the fertile pen and brain of an author who has made his mark in the domain of letters. The flattering success which attended the "Clinical Lectures on the Diseases of Women and Children," by Prof. Bedford, had prepared us to regard, with unusual interest, this systematic treatise on the "Principles and Practice of Obstetrics." It affords us sincere pleasure to say that this book is no failure. Our just expectations of the author are fully met. He has given us the established teachings in the science and art of obstetrics; he has gathered up the most recent discoveries and facts in the physiology and therapeutics of the theme; and yet, nowhere at no time does he overlook his personal opinions, theories, and experience. We thus have presented to us a degree of individuality that is refreshing in these days of flunkeyism and imitation We repeat our great satisfaction with this work, and cordially commend it as a complete and most attractive text-book on the science and art of obstetrics."—*Cincinnati Lancet and Observer.*

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"The best book on obstetrics yet published in the English language. It contains such a rich fund of valuable medical knowledge, and is so complete on all the subjects of which it treats, that we earnestly recommend it to our physicians."—*Philadelphia Eclectic Medical Journal.*

"The announcement of this truly American work by Prof. Bedford, cannot fail to excite great expectations in the minds of those who are familiar with the author's highly popular 'Clinical Lectures on the Diseases of Women and Children,' nor do we think they will be disappointed after having carefully examined this new candidate for professional favor, or conclude that the author has sent his work out any too soon. We must cordially express our approbation of the scientific research and practical detail so evident in every page. We believe this book is destined to take the first place in the estimation of the profession. Dr. Bedford deserves the thanks and gratitude of the profession, for having produced a national work of such unequivocal value."—*Chicago Medical Journal.*

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ORIGINAL COMMUNICATIONS.

DIPHTHERITIC CONJUNCTIVITIS.

By E. L. HOLMES, M. D., of Chicago.

There is perhaps no disease to which the attention of the profession and of the public has been directed for the past few years so frequently as to diphtheria.

Especial interest has been awakened in this country from the fact that so long a period had elapsed since the last appearance of the disease, that physicians were almost wholly without experience in its treatment at the commencement of the present epidemic; this interest has been increased by the fatality of the disease which has too often baffled the most scientific skill and carried sadness and grief into thousands of families. The disease is remarkable, we believe, not only for the duration of the epidemic, but also for the length of time which may elapse from one epidemic to another.

The medical journals throughout the country have published numerous articles upon the subject, and have reported cases illustrating the peculiarities of the affection; but we are not aware that much has been written in regard to diphtheritic inflammation of the conjunctiva. This is probably to be ex-

plained by the fact that this disease of the eye is very rare in this country. We believe the same is true of diphtheria affecting other portions of the mucous membrane than those of the mouth and throat, leech bites and surfaces of the body denuded by burns and blisters, as reported not unfrequently by European observers. In an aggregate number of more than ten thousand cases of diseases of the eye, tabulated in several annual Reports of the New York Eye Infirmary, there is not a case of diphtheritic conjunctivitis. In eleven hundred cases of ophthalmic disease which we have treated in Chicago, we have met with true diphtheritic membrane in only one instance. Upon enquiry also among our medical friends with extensive practice in Chicago and different portions of the State we have heard of only one patient affected with this disease. We have had an opportunity of examining but few of our Medical Journals, and are consequently ignorant of cases which may have been reported in various parts of our country. Prof. Clark, in his lectures on Diphtheria in the American Medical Times, vol. ii. 1861, alludes to several cases which fell under the observation of Dr. Rives at the Children's Hospital on Randall's Island. He also published in one of these lectures the history of one case observed by Dr. H. D. Noyes of the New York Eye Infirmary. As the disease is seldom mentioned in the London ophthalmic hospital Reports, it may be inferred that it is also rare in England. On the Continent of Europe, however, the disease is quite common.

The three most reliable papers upon Diphtheritic conjunctivitis with which we are acquainted are one by V. Graefe, published in the first volume of the archiv fur Opthalmologie, one by Jacobson in the sixth volume of the same work, and another by Dr. Lewinski in the Annalles d'omlistique 1861.

The article by V. Graefe is said to be the most scientific and comprehensive that can be found in any language. It contains a thorough investigation of nearly every thing pertaining to the disease, including an accurate description of the peculiarities which distinguish it from other forms of acute

inflammation of the conjunctiva, in reference to diagnosis and treatment. The article has been translated and published in the London Medical Review. We would recommend these papers to the consideration of all those interested in this subject.

A typical case of diphtheritic conjunctivitis has certain peculiarities, which characterize it from muco-purulent (blenorrhœa) inflammation. "In the latter, the conjunctiva is spongy, œdematous, filled with a fluid exudation, while in diphtheria it is unyielding and filled with a firm fibrinous exudation; in the one the lid will be found soft, puffy and easily turned, but in the latter stiff and less movable. The conjunctiva in Blenorrhœa is supplied with an unnatural amount of blood and the circulation is free in the greater part of its vessels. The diphtheritic conjunctiva on the other hand is in a great measure deprived of its supply of blood in consequence of the great firmness of the exudation, causing an undue pressure upon the vessels."

The discharge from the mucous membrane in Blenorrhœa is a homogeneous pus, while in Diphtheria it is thin, of a dirty gray color and more irritating or even corrosive in character.

The heat is much higher in the diphtheritic than in the other form of inflammation. In the latter disease, wet (cold) compresses require changing every two or three minutes; in the former they become much more rapidly heated, requiring change every twenty-five or thirty seconds.

The pain is much greater in the former than the latter.

The swelling of the conjunctiva, independent of the submucous membrane is greater in the diphtheritic than in the purulent inflammation, as may be seen by examining a section of the conjunctiva in each disease after scarification.

The following is the usual course of the disease: An eye, previously to all appearance, healthy, or more frequently an eye, which has been affected with inflammation is suddenly attacked with sensations of pain, heat and swelling accompanied with more or less increased secretion of tears. The

swelling of the upper lid soon becomes so great that all its folds are obliterated. Upon turning the lids the conjunctiva instead of presenting the usual red, rough, vascular, appearance peculiar to ordinary severe inflammation is smooth, yellowish and glistening and an inexperienced observer, for this reason would imagine that the affection was less serious than the other. And yet, in a vast majority of instances suitable treatment will relieve the latter disease, while the former proves in a large number of cases even with the best treatment one of the most dangerous, to which the eye is liable. The conjunctiva of the lids and sometimes of the globe becomes infiltrated with a firm organizable exudation, which in the most severe cases almost wholly destroys the circulation in this tissue. The exudation is also thrown out upon the surface of the conjunctiva forming a layer varying from a half a line to a whole line in thickness. The microscopical appearances of this membrane are well described in the first lecture of Prof. Clark above mentioned. This process of exudation, which takes place during the first stage of the disease in mild cases lasts but two or three days—in severer cases it contains six or eight or even ten days. At the termination of the first stage the membrane commences to exfoliate—occasionally in a single large layer of the form of a lid, but usually in small fragments, leaving a red, roughened, bleeding surface, which is the commencement of what may be called the second or blenorrhoeal stage, characterized by a mucopurulent discharge. Not unfrequently after the exfoliation, the membrane is renewed and again cast off—this process being in some cases repeated several times. The duration of this stage varies in length even more than the first. The third stage, when the disease is not arrested in its course, is distinguished by atrophy of the conjunctiva and even of the lid, in consequence of insufficient nutrition caused by obstruction of the arterial and venous circulation. The absorption of the conjunctiva is sometimes so great that the edges of the lids are bound quite firmly to the globe.

The prognosis as regards vision depends almost entirely upon the condition of the cornea. In consequence of the great derangement in the circulation and nutrition of the cornea and its adjoining tissues, the cornea very often, early in the course of the disease, presents a cloudy appearance over a greater or less extent of its surface. In twelve or twenty-four hours, the epithelium is removed and ulceration commences which often disorganizes a large portion of this important membrane. The prognosis is generally less favorable for adults than for children. The amount of exudation, and chemosis, the rigidity of the lids and the degree of ulceration of the corner are symptoms of the greatest importance as regards the ultimate result.

Of the true causes of diphtheritic conjunctivitis little can be said. It is undoubtedly a constitutional disease, the affection of the eyes being symptomatic. While mucopurulent conjunctivitis seems frequently to attack individuals in perfect health, as readily as those suffering from other diseases, this form of inflammation is almost invariably found in patients with health more or less impaired. Nearly a fifth of a series of cases in children (forty in number) observed by V. Graefe, bore undoubted signs of congenital syphilis. It is stated that the disease in this country has generally attacked patients affected with measles or scarlet fever.

The disease in Europe usually appears as an epidemic, as is shown by the observations of those who have had most experience. V. Graefe states that in his clinic, in which four or five thousand patients are annually treated with diseases of the eye, the affection disappears for months and again returns, following about the same laws in this respect as diphtheritic inflammation of the throat.

In reference to the period of life most subject to this disease, Graefe's cases show that one in fifty patients are attacked during the second half of the first year. Nearly one-half of his patients were between the ages of eighteen and thirty-six months. As the age increases beyond eight years, the disease

becomes quite rare. The disease can be communicated to a healthy eye by direct contact of the abnormal discharges. This almost invariably produces an inflammation of the most violent form, which, however, is not necessarily diphtheritic, but in many instances simply muco-purulent.

It would appear from the reports of cases, which we have been able to consult, that no absolutely satisfactory mode of treatment has as yet been discovered. Oculists of experience do not agree in reference to the use of calomel, caustic applications and local depletion, either by leeches or scarifications. The best authorities, however, have abandoned the use of caustics in marked cases of this disease during the first stage. Graefe recommended the free application of leeches to the side of the nose near the inner angle of the eye, and especially of compresses dipped in water. These should be changed day and night every few minutes. Particular care should be taken to remove the disharges from under the lids. Graefe recommends milk as a simple and soothing application for cleansing inflamed conjunctiva. The same author speaks decidedly in favor of full doses of calomel and especially of the endermic use of Ung. Hyd. until marked constitutional effects are produced. He states that the exudation loses its firmness and the disease often assumes the form of simple muco-purulent inflammation after their use. Patients should be confined to a liquid diet. Under this treatment more than two-thirds of Graefe's cases recovered, while scarcely a single favorable result attended less appropriate treatment.

In severe cases of diphtheritic inflammation of the eye, where not only the substance of the conjunctiva is infiltrated with a firmly organized lymph, but its surface covered with a tenacious membrane, we are certain no caustic application will arrest the disease. Incisions must be carried to great depth in order to produce depletion. It is doubtful whether much advantage can be accomplished in this way, since the incisions are soon closed with lymph, preventing much escape of blood. In the second stage of the disease, after the mem

brane has been thrown off and the surface of the conjunctiva presents the appearances of ordinary purulent inflammation, caustics and astringents may be used with benefit.

Although we believe the disease in its most violent form seldom leaves the cornea clear or the lids in their natural form, it is stated that sporadic cases are much less dangerous. It should be remembered that occasionally in ordinary inflammation of the conjunctiva, small patches of diphtheritic membrane will be formed upon the diseased surface. Such cases are usually quite mild. With these patches, however, should not be confounded circumscribed elevations, which are somewhat similar in appearance to them, but which are simple thickened mucous adhering to the surface and are not to be regarded as a serious symptom.

FORT DONELSON.

Your correspondent was one of the favored twenty selected by the Sanitary Committee of Chicago to go to look after the wants of our wounded at the fight at Fort Donelson. Tuesday morning found us aboard the train on the *Illinois Central* bound for Cairo, with hospital stores and delicacies. The Board of Trade and Citizens' Committees were also along, which gave us quite a deputation from Chicago.

Our train was hailed by anxious crowds at every depot, the fact of Donelson's surrender being rumored at most of the points we came to, and the shouts that went up from the assembled hundreds told of the response it met in their feelings. We had constant accessions, until sitting room was at a premium—friends starting to look after sons, brothers, and there was an air of anxious contentment on most countenances, that few could look on unmoved. They seemed to suppose their friends dead, but the cause in which they died dissipated every other feeling. One mother going to look after her only son,

especially attracted my attention, as she would mingle her hopes and fears in her conversation, it was easy to see which a mother's anxieties placed foremost.

As night approached, thoughts of sleeping cars were suggested, and Mr. Wicker, our energetic spokesman, telegraphed to Odin to ascertain the chance of securing one for our delegation. It was announced secured, and the illusion was only dissipated upon arriving at Odin, finding every place taken, the cross trains, on similar errands, having secured every birth. A few of our party, by some exchange or courtesy, secured places, and I, by the kindness of Dr. Evans, was favored with a few hours rest. I did not sleep—as I never do—nor could I, had I been most amiably disposed to. There was such a constant uproar of snoring as to drown the rattle of the cars. We had all varieties, from the high-toned amateur, to the old, well-developed, full bass. Some snored races, others at a mark; some by note, while others seemed, by their deliberate, dry, stiff getting-it-out, as tho' trying to spell it.

Our train was so long and heavy after leaving Odin, that before arriving at Cairo on an up grade—the track was slippery from the falling rain and sleet—we had three engines to take us along, and then had to take the advantage of down one hill to up the other.

We did not arrive at Cairo until 10 A. M. Wednesday, six hours behind time. Those who have been in that attractive and romantic locality, will appreciate the landing there, while it was pouring torrents, and the streets in their most hospitable mood. Their disposition to take you in was only equalled by their determination not to let you go, in so far we felt we were nearing Dixie.

I met Prof. Weber, of Cleveland, at Odin, who, as Surgeon General of Ohio, was going to look after the wants of the Ohio troops. We set out together at Cairo to find "Head Quarters," as only by passes can you get about in that martial law town. We found, as had been intimated before arriving, that no passes were issued to Donelson—orders absolute. The

excuse given by Gen. Paine, was that his jurisdiction only extended to Paducah, and of course he couldn't. We took our passes to Paducah. Meantime, on learning of the determination not to allow us to go to Donelson, our Chicago delegation had appointed Dr. Evans and Judge Scates to wait on Gen. Paine and inform him of our wishes, and urge an exception to the rule—which was so far successful, after very much trouble and urging, that while he did not issue passes himself, Dr. Taggart was furnished with blanks, and those desiring one marked for "Donelson," among which I was numbered.

When this point was gained, the next anxiety was to get a chance to go, as the running of steamboats was a matter of no certainty. However, we got word that the Governors of Indiana and Illinois, with their staffs, were on a Government boat, "Belle of Memphis," going up to Fort Donelson—and *had been for twenty-four hours.*

That was suggested as the most certain way of getting up, and so we got our baggage aboard, where we found a number of our delegation. The boat was very much crowded, the state-rooms all taken by the "staffs" and Governors, and, from what I heard of one of the latter officials, he found it necessary to keep his closely. He got so discouraged at the delay, that it depressed him.

Within an hour of starting and near night, our passes were called in question, and were decided of no use—could not go on them, not being properly countersigned. Word came from another boat, the *John Warner*, where the balance of our friends had taken passage, that a similar trouble existed there, and it was pay, or *go*, and pay *if* you go. Col. Cummings being aboard, interfered and used his best influence to get our matters straight, offering to certify to our mission, etc. The amiable clerk at last agreed to carry us to Donelson, but must lift our passes, so that we could get back as best we might—unless we came back when he did. It was finally concluded to risk the getting back, and we remained on board.

The whole was gotten up for effect, for, as we ascertained

afterward, the boat being employed by the Government at so much a day, our passes were good and he was not required to have any evidence of having carried us—to obtain his pay, as he asserted—as also further proven by the fact that our passes *were never asked for.*

The embarrassment at Cairo had a very unfavorable influence on many of our company, who seemed to be no friends in the first instance to "red tape." It is not according to our go-ahead way of doing things—a man's mission being all the pass he needs. Not so there, everything went according to rule, greatly to our annoyance. All well no doubt, and yet it was rather discouraging for men who left profitable professional employment many of them, and others occupations not less so, to attend to the wants of sick and dying men, to find men standing resolutely in the way of its accomplishment. The impression left, though the rule may be right, was not good.

Our steamboat troubles, we found were not so much owing to the trouble about passes as to the Captain's political views. He was a Secessionist, whose boat had been impressed.

In the afternoon, while waiting, I visited the gun boats. They are formidable looking machines; sides slanting from the water to the top, or hurricane deck of ordinary boats, upon which the pilot house is situated, whose sides also slant. The sides are iron-plated, which forms a uniform covering, except the port holes for the pilot to see through. These slanting sides give the striking ball, an obliquity which increases their aptitude to glance. The smoke stacks, with the pilot house, are the only objects which interrupt the uniformity of the vessel, except a narrow walk around the outside, on a line with the port holes. I first visited the *Tyler*, upon which I had the good fortune to meet my friend Dr. Jones, of Cincinnati, who was its Surgeon. He showed me in detail its inner works. The inside is kept scrupulously clean. The guns, of various size and beautiful construction, seem to be the most

perfect of all war apparatus. They are kept in perfect order; vary in number—four on the sides and three at each end, being, I think, the usual number. The *Tyler* is entirely new, never having been in service. These gun boats seem altogether better fitted for serving cannon than any other. Everything can be kept in its place; no dragging them about on land to get stuck in the mud; men as well protected as possible; port holes just large enough to allow the men to stand beside while they load. But the shock must be tremendous in the confined room. Wonder if they have had the suggestion, of glycerine on cotton to fill the ears, made to them? I forgot it.

I next visited the *Essex*, where I found another friend, Dr. Rice, as Surgeon, formerly of this city. Capt. Porter is Commander. One needn't go very far over that boat to see that it has seen service. It was at Ft. Henry and received two balls, which went through it from end to end, besides numerous others. The front part of the boat is not yet plated, though it is painted black and from a distance it would be impossible to tell that it was not, but the enemy knew it. One ball struck directly in the forward end and went the entire length of the boat, hurting nothing except tearing the boards handsomely and coming out of the stern, which was also unplated. Another ball was more fortunate. It passed through one of the forward port holes, took off the hinder half of the head of Capt. Porter's aid, Brittain, and struck the steam pipe, cutting it, filling the room with steam, which went up filling the pilot house, scalding two pilots to death instantly and some marines. Captain Porter, as our readers recollect, was very severely scalded, but told me he had presence of mind to cram his scarf in his mouth. One of the sailors picked him up, and though he is a man weighing over two hundred, carried him on the narrow walk outside (9 inches wide) the entire length of the vessel, from before aft, during the progress of the battle, and so saved his life. The Captain related to me the attachment of one of our marines to our flag. One of these

worst scalded, when it was announced that the white flag was up at Henry, raised himself up on his elbow—"Three cheers for the Stars and Stripes," said he, and, falling over, died with the words on his lips. The Captain was very severely scalded and his life was despaired of for several days. When I saw him his face was still scabbed over, and his eyes closed almost entirely, but he didn't talk as though there was, or even had been, anything the matter. He is decidedly a bold, fearless Commander, and a fit one to follow where our brave, pious old Commodore leads. I there met Lieut. Paulding, another, who, as well as Porter, are descendants of Commodores in the U. S. navy, whose names they bear, and whose history warrants us in expecting good things of them.

We got off up the river about 5 o'clock in the afternoon. Our accommodations were none of the best, but I secured what I could of a mattrass, only six feet in length, by the kindness of some friends, and, having slept none the previous night, enjoyed it finely. As to eating, we could get nothing. The steward pretended to serve those who wanted it at the inevitable four shillings, but, hungry as I was, I had no stomach for it. Like some of our single handed eating houses one pot of vegetables would last an entire season. How or by what process they alter the taste of their cooked food so that one cannot tell what it is, is more than I can imagine. Everything had a "gulchy" taste.

We had on board, that I recollect, Gov. Morton, of Indiana; Gov. Yates, of Illinois; Prof. Weber, of Cleveland; Dr. Douglass, of *Am. Med. Monthly*, who is connected with San. Commission; O. M. Hatch, our Sec. of State; ex-Gov. Wood, of our State; Comp. Ward, and Rev'ds Collyer and Tuttle, Drs. Rogers, Walker, Hahn, Andrews, of our city; Dr. Cornyn, of Gen's Lyons' staff.

We had rather a pleasant time, though we began to see the evidences of approach to our destination.

A gentleman got on at Paducah, who learned from one on board that his only son was killed. It could not fail to move

the heart of any one to see the tears rnnning down the sunburnt face of that devoted father, while he told of that only, dear boy, before he left home last spring, planting the roses over and adorning the grave of an only daughter.

We arrived in sight of Donelson on next afternoon, Thursday. The afternoon was very chilly, though all were on deck, and, as we neared it, one thing was certain—the admirable selection for defence. The Fort is situated on an eminence or bluff; with its water batteries below, commands the river, which approaches it—a straight line for three miles—with no way to come except straight up to it, unprotected by the slightest bend in the river. The banks bore evidence of the recent conflict.

When we arrived at the landing, I got my pass, and having friends in the gallant Iowa Second, parted with Prof. Weber, expecting to meet him on the morrow, and, by the way, we haven't met yet.

It was getting dusk before I set out on my uncertain errand of finding a regiment among forty, without any directions as to where they were or how to find out. I started over the hill to get among the camps to get my information if possible. I got over the hill, and into the mud, and dark and brush, and stumps and water, and hollows and ravines, and creeks and logs, and every place except where any one could tell me anything I wanted to know. You can get a good idea of their knowledge of each other's regiments by the knowledge of individuals of each other in large citizes.

Nothing daunted, still I went. Some one suggested that, as they had fought on the right, they *might* be in the Fort. That was hint enough to walk a few miles on at least, and off I started at the point of a man's finger for the Fort. To undertake to describe how I got to that Fort that night would tire the patience, if it didn't the credulty, of your readers; how I came to bottomless roads, necessary to cross, and yet found the *bottom;* impassable creeks, and yet *passed* them; changed guides twice, both picked up by chance, and yet the

very men most serviceable; and when at last I got into the Fort, found our regiment there, and, above all, my friends both safe, I may leave my readers to imagine that I felt as though rescued.

The next morning (Friday) I went, in company with Col. and Adj. Tutle, Surgeon Marsh and Assistant Surg. Nassau, to view the scene of the late conflict, and their glory. To describe everything I saw would require more time than I can spare, and perhaps ere now my readers are beginning to think this a curious professional letter. I didn't have the least idea when I began of writing a professional letter—only things as seen by a professional man.

The Iowa Second Regiment is the regiment of honor, as having led the charge on the intrenchments and being the first inside. I saw the place of their charge and entrance, and I must say it was an accomplishment worthy of the praise it has received. All honor to the Surgeons of the regiment, for they did their whole duty. The Surgeon established his quarters, and the Assistant Surgeon, Dr. Nassau, followed with his squad between the wings within fifty paces of the entrenchments, where his men began to fall, and carried them to the rear. There was no deputy needed for him; he went himself. For cool courage and successful accomplishment that charge has few parallels in history, and received the merited compliments of the rebels themselves.

Several narrow escapes by the Colonel were told me. A cannon ball struck a log on which he was standing, knocking it from under him, injuring him by the fall very severly. While he was crossing the head of a ravine he saw two men lying by the root of a tree, both aiming at him, not more than thirty paces distant—both missing. The bullets passed by his head, when one of his privates stepped forward, fired, and killed both of them. A ball passed through his gauntlet, striking the hilt of his sword, and paralizing his hand for a time. The regiment suffered much. Out of about 500 men taken into battle, 202 were either killed or wounded.

We followed around the entire line of entrenchments. The hardest fighting was done on the extreme right. Everything betrayed the sanguinary struggle that had there taken place. Horses dead; filled trenches marking the graves of the slain; some marked by boards with names and regiment; others without any mark; trees cut off, barked and scarred; hats with holes through and blood marks inside; cartridge boxes, canteens, and everything in mingled confusion, with here and there the hitherto undiscovered remains of some victim. At one point at that part of the entrenchments I noticed that the trees and underbrush were unusually marked by bullets. I saw, in passing a hundred yards, not a single one untouched. One tree six inches across had in the first eight feet of it fifteen bullet marks.

From the right of the entrenchments we passed through the little town of Dover to the river. In passing I called at a single hospital, which was mainly occupied by rebel wounded. The Surgeon was a Dr. Metcalf, of this State, and a rebel Surgeon, Dr. Holcom, of Miss. The patients seemed to be well cared for and in good condition. The hospitals of Dover are the larger dwellings, churches, while others are placed in sheds, and many of them in most destitute condition. I saw none of these myself, but had it from others that they were most deplorably cared for, lacking everything that could assuage the sufferings of the wounded or give them a chance for life. Their surgical attendance is entirely inadequate, and there is no effort made by the inhabitants, though the wounded there are nearly all secessionists, to give them relief. Their Surgeons were allowed to attend their wounded, and, when told of their needs, quietly said they had nothing to do with them when they did not belong to their regiments.

I arrived at the river about 2 P. M., and set out about finding where there was work to be done. I went aboard the *City of Memphis*, and found it to be the Hospital Boat, and without a Surgeon except the boat Surgeon, Dr. Turner himself. This boat receives the sick and wounded as a depot,

and then sends them off by other boats, as may be directed. There were on board over 200 wounded soldiers, and one may well wonder how much headway one Surgeon could make in such a list of cases, and in addition have the entire charge of the boat, moving patients, &c.

It is said that the amiability and professional courtesy of the polite and well disposed physicians of a neighboring city are chargeable with this delightful and humane state of affairs; but of this I know nothing more than rumor, and hope for the sake and in the name of everything honorable it was not so.

I met Dr. Turner, who politely invited me to go work, and I was soon engaged in all the military surgery the most anxious could desire. When I started I began alone to work on one end of the long tier of cases. Very soon Prof. Andrews, of this city, came aboard, and we divided the boat between us. Soon, also, Drs. Rogers, Hahn, Walker, of this city, Dr. Perry, of Hunter Station, and Dr. Wyman, of Rockford, came and gave us valuable assistance.

The wounded occupied the cabins of the boat from one end to the other; arranged with their heads towards the state rooms, and as close together as their mattrasses could be placed. The state rooms were all filled also, except a few at the stern for the officers and nurses. The sick were placed principally in the state rooms, the wounded outside.

Nurses were detailed from the regiments there to wait on the sick, and some were most valuable, while some of them were indifferent, and the first night many of them went to bed and left the volunteer help to provide for their wants.

We had some most serviceable help of that sort from this city, and some whose aid was invaluable, and such as should entitle them to the everlasting gratitude of Chicago. I particularly mention Comptroller Ward, A. G. Downs, Rev'ds Collyer and Tuttle, and Mr. Munson. These gentlemen did a noble and devoted part by these poor wounded, suffering and dying men. Many a look of unspoken gratitude was given to them from the fast glazing eye of the dying soldier.

We had a work before us that could well move the deepest feelings of the most insensible heart. There lay twelve score of men who had perilled their lives for us and our country. The misfortunes of war in their worst shape had overtaken them, and quiet, gentle, comforting words of all, both Surgeons and nurses, tended as far as could be to make their sufferings bearable, and showed how profoundly sensible they were of the character of the cases they had in charge. I continued up, working with my cases until three o'clock next morning, and by that time we had succeeded in redressing all the wounds and making them comparatively comfortable.

The Surgeons who had previously dressed the wounds seemed impressed with the idea that the quantity was of much importance, and as a consequence bullet wounds were well linted and closely bandaged over to prevent the escape of matter. The trouble seemed to be *too much* dressing. One case of gun-shot wound of hips must have had three full length rollers on it, or near thirty yards.

The simplest possible dressing was used, and where it could be applied, nothing more than a compress dipped in cold water, and frequently changed. One Surgeon is mentioned at Paducah, who, from want of anything else, or his own originality, dressed his wounds with blistering cerate.

The wounds were of almost every possible variety, and I call up from memory, after the lapse of two weeks, some of those that I saw.

Two wounds of head by balls, both balls entering brain; one had died and other would. One struck by passing ball, depressing skull; I trephined him, but he would probably die. One upper jaw shot out; one lower jaw struck by a ball at symphysis and broken into four pieces, one piece taken out and others very much dislocated by action of muscles. He was a brother of one of our students of 1860–1, who was with him and giving him a brother's care. Erysipelas also broke out in his face; treated with Iron locally and Iron and Quin. internally. One case a bullet entered the external ear coming

out on the opposite side between the jaws in front of the ramus, cutting the palate severely. One case a bullet passed between the esophagus and trachea. One a bullet entered as the body was stooping at the lower end of the scapula coming out on the neck in front, cutting the apex of the lung. Three cases of bullets directly through lung, all died. Two were of Minnie balls—holes very large—and both of them suffered very much. Several wounds of the arm and forearm; one a fracture of the surgcial neck by a ball. One ball struck a man lying on his side in the epigastric region and following between the layers of muscles came out on the back part of the hip. One, the son of the lady I mentioned as going to look after her son, was shot directly through the right illiac region, the ball remaining in, and he well enough to be removed home—no seeming trouble. One poor boy shot directly through the sacrum, suffered terribly, paralized bladder, though his bowels moved naturally. Had also another wound through thigh.

Very many were shot through lower limbs; three or four through knee-joint; two through ankle-joint. Those through the joints, as inflammation arose, suffered intensely. We had several cases of amputation on board which had been performed. All the operative surgery had been performed before, as it was a week after the battle. The wounds made by the balls of different kinds were generally easily distinguishable. The modern minie ball, from its great size and tearing qualities, will most likely largely increase the mortality from wounds, of those not killed immediately. The inflammation in joints arising from such balls, must need be destructive.

The wounded were mostly very patient and easily satisfied, and grateful for attentions. They seldom complained, and with few exceptions, and these with every reason, made but little noise. One poor fellow, whose breast had been bored through by a Minnie, suffered excruciatingly at every breath—seemed as though he couldn't die. I think I never had my sympathies more completely stirred. His name was Allen, from

Effingham, in this State. I raised him often, to try to cough the mucus and blood from his clogged throat, and the air would escape by the bullet holes, frustrating his object, until I stopped them with my fingers.

One soldier named Medland—31st Illinois, Co. B—was in the first instance shot through the knee-joint. He did not give up, but still kept firing. Another ball struck and went the whole length of the thigh—a flesh wound; and still he fired until a ball coming shattered his left arm and stopped his handling his gun. This man then lay on the field 2½ days, without food, drink, or shelter, before his wounds were dressed. I had no more resolute man, or more cheerful one, under my care, and he talked happily of the time when he would be well enough to try it again.

Another almost similar instance of a young man named Broderick, 8th Illinois, first shot through hips, then arms, and not until a ball broke his gun, shattered his left hand, did he desist.

Surgeon Marsh told me that of his two hundred and two wounded and killed, but a single man moaned, and he was shot through the lungs.

On Friday afternoon we changed to another boat seventy-five of our cases—bound for Cincinnati. On Saturday morning we had some stores from Chicago put aboard: wines, jellies, lemons, brandies, and it was a great comfort to our suffering patients. The suddenness with which such a number of wounded men are precipitated on us must be some apology, and yet there must have been criminal negligence somewhere, for our boat was unable to obtain a pound of fresh meat to give our patients, and instead of animal broths we had to feed them on indifferent corn gruel. I maintain that when men are willing to peril their lives for us, the least we can do is to take good care of them, and do it promptly. We left on Saturday morning and arrived at our destination, Mound City, the next morning.

We lost six or eight on the way. Two cases of amputa-

tion died; one of the leg and one of the thigh. I noticed particularly how excessively painful their wounds become as collapse set in; to me an unusual thing in other practice. It rained Saturday; and while we kept as well aired as possible, the stench become almost unsupportable. The consequence was we had four cases of Erysipelas before we got to Mound City.

I went through the hospital at Mound City on Sabbath, and was greatly pleased at the admirable arrangements it contains. It is one side of an entire square, upon which a business block of buildings had been erected. They have been fitted in a substantial and convenient manner for wards, and it makes a magnificent hospital. Everything about it is marked by order and care for the inmates. The building is three stories high, each of which furnishes a ward the size of the intended store below. The wards are very numerous, well ventilated, light, clean and comfortable. The patients and their beds are clean. Their food is of good quality, well cooked, and put before them in an eatable shape. Many of them I noticed with articles of luxury that must have been gratifying to their dainty palates.

I saw of the Sisters of the Sacred Heart there, who have the supervisory care of the nursing, and admirably is it done. I was more than pleased at the quiet, orderly and unobtrusive way in which they performed their deeds of nursing. I cannot say so much, however, of the generality of our volunteer female nurses. I think they are a nuisance, and one that ought to be abated instanter. It is the opinion of the Army Surgeons also. Many of them are very excellent women, but such as are, seldom retain their excellencies. I think a female, to go into the wards of an hospital as a common nurse, is sadly out of place; and if she has not already lost her womanly delicacy, will not be long in doing so, and either be slandered or *not*. Besides, very few women with minds right, their hearts and everything else in the right place, propose themselves for such a place. But there are services that can

be done by none so well as by women: the preparation of food, care of the linen, and cleanliness of patients, preparation and administration of delicacies. These, with other nameless hundreds of kind offices, can be done by none so well as women.

I found the wards there supplied mainly by volunteer Surgeons, and the care, skill and humanity showed by them in their duties is worthy of all praise. I met there Dr. Rooker, of Indianapolis, Dr. Riddich, student of Rush Med. College, Drs. Winchester and Adams, of Elgin, Dr. Fishbach, of Indiana, gentlemen whose qualifications give ample guarantee for the service they render.

The only unpleasant fact in connection with this hospital is that it is under the charge of a homœopath. But, as none of my acquaintances seemed to know it who were attending there, I don't suppose he intrudes either himself or opinions on them.

I append, by consent, Prof. Andrews' list of location of injuries, taken from *Medical Examiner*:

Wounds of cranium, 14; of scalp, 19; of eye, 4; of jaw, 4; of chin, 2; of tongue, 1; of ear, 3; of mouth, 4; other parts of face, 10; of neck, 8; fractures of shoulder, 13; flesh wounds of shoulder, 30; fractures of arm, 16; flesh wounds of arm, 27; wounds of elbow, 4; fractures of forearm, 4; flesh wound of forearm, 4; fractures of hand, 25; flesh wound of hand, 11; wound of chest penetrating cavity, 10; wound of chest not penetrating cavity, 10; wounds of back, 5; wounds of abdomen, 7; fractures of hip, 7; flesh wounds of hip, 8; fractures of thigh, 9; flesh wounds of thigh, 37; fractures of knee, 2; flesh wounds of knee, 7; fractures of leg, 9; flesh wound of leg, 27; fractures of foot, 4; flesh wounds of foot, 2; powder burns, 2. Total, 360.

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CASE ILLUSTRATIVE OF PREJUDICIAL INFLUENCE OF QUININE IMPROPERLY ADMINISTERED.

By DR. EDWARD LAWRENCE,
Hopper's Mills, Henderson Co., Ills.

[This paper was received some time since, but was mislaid.]

A little boy aged three years, with a very large brain, was taken with fever on Wednesday night. Thursday morning the fever had somewhat abated, and the mother prevailed on the child to go to the breakfast table, but the boy said he was too sick to eat. While at the table, the child was seized with a convulsion, and fell off the chair on the floor. Reaction took place, and the parents sent for Dr. ———, who came immediately, and said the boy had the ague, and prescribed twelve powders of Sul. Quinine; one to be taken every two hours, commencing about ten minutes after reaction from a convulsion.

I was requested as a friend to step in. I found the child in high fever, skin dry and hot, with a great determination of blood to the brain; pulse quick, hard, tense and incompressible; pupils dilated; tongue coated in the center, with edges and tip red; abdomon enlarged and hard, showing a retention of urine.

In about fifteen minutes after Dr. ——— gave a quinine powder the patient had another convulsion. They gave four of the powders, and the patient had four convulsions.

In the afternoon I was called to see the patient. I found all of the symptoms aggravated. The patient was in a comatose state, with great determination to the brain. I ordered cold applications to the head, mustard draft to the spine, used

the catheter, and prescribed x gr calomel and 1 gr James' powder. After waiting eight hours, ordered a dose of castor oil. In due time the bowels were moved, but no action on the liver. I repeated the dose, but with the same result. I then prescribed four powders, containing each 1. gr Calomel, ½ gr. Ipec. and ½ gr. Opii; one to be given every two hours; which had a decided action on the liver, resulting in amelioration of all the urgent symptoms. Together with the above treatment, I gave Sweet Spts. Nitre and Syrup Ipec. every two hours, with the view of controlling the action of the heart, equalising the circulation, and giving a determination to the skin.

Other urgent symptoms set in that appeared almost insurmountable. Although the pulse became soft, full and compressible, there was still a tendency to determination to the brain. The determination had been so great that paralysis of the bowels and bladder was the result. I had to resort to catheterism every day. The bowels became tympanitic from loss of nervous influence. I gave large doses of Turpentine every night, bathed the bowels with the same, applied the bandage, and kept cold applications to the abdomen I continued the above treatment, fulfilling every indication as it arose, until the seventh day of the fever, when the remission became distinct. Then I prescribed eight powders, each containing 1½ grs. Sul. Quinine, ½ gr. Ipec., ½ gr. Chlor. Potash; one powder to be given every three hours during remission. Under this prescription the child appeared to rally, although the accumulation of gas in the bowels was very great, I could relieve it by introducing a large sized elastic male catheter, and warm injection of rain water, salt and castile soap.

I continued the Quinine prescription for three days, when the child was restored to health. The healthy function of the bowels and bladder was gradually restored. The tenth day from the commencement of the fever I discharged the patient.

The indications of cure in this case I thought were, first—to relieve urgent symptoms; second—to draw off irritation

from the brain, control the action of the heart, and equalise the circulation; third—to establish healthy secretion; fourth—to break up the paroxysm. I fulfilled the first by resorting to catheterism, and cold applications to the head; second, by sinapisms to the spine, and administering a cathartic arterial sedatives and diaphoretics; third, by administering small doses of Calomel, Ipec. and Opii; fourth, by tonics, diaphoretics and saline diuretics.

Did the course I pursued have a tendency to cut the fever short or prolong it?

The previous treatment I thought was wrong from the fact that there was such a great determination to the *brain*. I was under the impression that the Quinine only caused a greater determination to that organ.

TWO CASES IN PRACTICE.

By J. B. HOAG, M. D., Windfall, Tipton Co., Ind.

About the 1st of August, 1860, whilst visiting the town where I now reside, I was requested to visit a child which had previously been under the charge of a so-called "Eclectic," who had pronounced it a case of phrenitis, and prognosticated a fatal result. Contrary to the usual habit of his class, he consented to my taking charge of the case.

In a community a large number of whom pinned their faith implicitly upon the Eclectic's sleeve, it may be imagined the noisy clamor of tongues which ensued. It may be left to surmise how the "permanent committee" of gossips reported a chorus of "chin music."

Alas for human nature!—but it seemed as though, whilst astounded at my presumption in daring to come athwart the pathway of their favorite, they almost forgot to wish that the child might by some means be spared to the widowed mother.

The patient, a little girl of three years, I found with a high fever, in a comatose condition from which it had been impossible to arouse her for forty-eight hours. From the entire absence of evidences of phrenitis, and the history of the case, there was no difficulty in diagnosing the real character of the difficulty to be bilious remittent, aggravated by the nature of the gastric and intestinal contents, evidently of a noxious character, and probably also by the presence of worms.

Much to the comfort of the mother, but, I regret to add, exceedingly to the discomfort and chagrin of our eclectic friends, I gave a favorable prognosis.

One of the ladies of the "permanent committee" immediately conveyed the budget to Dr. S., the eclectic, of course not forgetting the worms. Whereupon S. avowed his deliberate intention to eat every worm passed more than three. Three worms were, I suppose, allowed as the normal total for the three years of the patient.

Ordered the child a free cathartic dose of calomel, with a small quantity each of ipecac and gamboge. Applied rubefacients (horse radish leaves) to the nape of the neck, hands and feet.

In a few hours the medicine operated; the first passage the mother remarked, "looking like the white of an egg, only it was green as grass." As soon as this was discharged, the child roused from its stupor, and raising one of its feet, called, "Ma, ma," the first words it had spoken for more than two days.

The draughts were removed, and I then exhibited Sp. Nitri Dul., combined with Tr. Verat. Virid., and repeated the mercurial cathartics (principally Hyd. Cu. Creta) followed by Ol. Ricini. After a short time, the fever began to have short intermissions, during which I gave as large doses of Sulph. Quiniæ as I thought the child would bear. During the febrile paroxysms, continuing the mixture of Sp. Nit. Dul. and Tr. Verat. Virid.

It may be mentioned that within the first three days of treatment, the child passed a considerable number of worms, some alive and others dead—which, however, the eclectic gentleman failed to make good his promise with regard to. Convalescence took place rapidly and without any marked symptoms.

Some time subsequently, it was attacked with "congestive chills" of a dangerous type, but they were relieved by the usual treatment, and it is now in the enjoyment of excellent health.

Among the indescribably ludicrous features which, from the very outset, marked the history of this case, it may be mentioned, that the astonished Eclectic now declares that he never called it Phrenitis; that he never said it would die, and on the whole seems to doubt whether he was ever called to see it at all, or, if so, whether it was sick any how!—So goes the world.

In the same neighborhood, and under the oversight of the same Dr. S., was a case of very dissimilar character, but which to me shows the efficiency of active treatment for real disease. Many cases tend spontaneously to health, and these make the fortunes of Homœopaths and quacks of other shades; but some cases demand positive treatment, as I think the following illustrates.

J. G., unmarried, had been troubled for several years with dysmenorrhœa. I found her anæmic, variable and capricious appetite, feeble pulse, cold extremities, habitual constipation, evidently dependent on hepatic torpor. Menstrual discharges scanty, painful and irregular.

Ordered a free cathartic dose of Cal., Aloes, Ipecac and Capsic., to be followed by Ol. Ricini. After thus unloading the canal and correcting the secretions, I prescribed the following mixture, ℞ Tr. Guaiaci ʒij; Tr. Mur. Ferri ʒj; Tr. Myrrhæ ʒj; Tr. Aloes ʒiij; Tr. Sanguinariæ ʒiss; M. a teaspoonful three times a day.

Also, ℞—Carb. Ferri, part. ij; Carb. Soda, Pulv. Zingib. and part. j. M. S.—As much as would lie on a three cent piece, half an hour after each meal. Hot foot baths every night—a heaping table spoonful of mustard to a sufficient quantity of hot water. On the approach of the period, to drink freely of a hot decoction of wild ginger and tansy, and to apply a fomentation of the latter over the uterine region.

On the access of the first subsequent period, the discharge was more free, but still accompanied with considerable pain, which was soon mitigated by full doses of Pulv. Doveri and Camphor.

No modification of the treatment became necessary, as she speedily became perfectly restored. Is now married and enjoys better health than she had before for years.

The origin of the trouble illustrates a peculiarity of feminine tendencies. It appears that some three years previous, a church dedication was to occur at eight miles distant, which the young people of the neighborhood were anxious to attend The untimely advent of the menstrual period made the young lady fearful that she should be obliged to remain behind. The night previous to the meeting she stood for nearly an hour in a tub of ice water; the result, naturally, being immediate cessation of the flow and ruined health for years.

The only wonder is, that even more serious results did not ensue. But who can account for women ?

SELECTED.

CLINICAL LECTURE ON ANÆMIA AND BLOOD-LETTING.

Delivered at St. Mary's Hospital, Nov. 14th and 28th, 1861.

By THOMAS K. CHAMBERS,
Lecturer on Systematic and Clinical Medicine.

GENTLEMEN: You will all remember the corpse like pallor, made more conspicuous by red hair, of a girl, admitted this day fortnight into Victoria Ward. She smiled courteously, but was quite unable to rise from her bed. Her history is as follows:—

Margaret C., now aged 20, seems to have had very good health in general, as is shown by her remembering that she had such an unimportant ailment as a pain in the right side when she was a school girl of seven years old. She seems to have been carefully brought up by a step-father in a higher class of life; but three years ago she lost him, and had to go into service as a housemaid. For this work she was hardly strong enough, and, perhaps, too tenderly educated, and after eighteen months' trial she gave it up, and was apprenticed to a Berlin-wool shop. In this place her mental superiority was apparently recognized, for she quickly became forewoman, with three girls under her, in a shop at Maidstone. She felt this responsibility a good deal, and also thought the closeness of the shop did not suit her, though it did not seem to make others ill. However, she retained a high, bright color in her face, for which she seems to have been somewhat admired, till nine months ago, when she began to lose it, and in a few weeks became as waxlike in hue as she is now. At first her appetite was large, and she always seemed in want of food; but after three months it failed, then ceased entirely, and she took a disgust to food. She had a good deal of pain in the epigastrium and to the left side of it, and also palpitations and pain of the heart. Three months ago she spat up some blood,

and had a little cough, which frightened her sadly Three times during the nine months she has had attacks of low spirits, with crying, but does not appear at all hysterical now. The catamenia always were quite regular and sufficient till the commencement of the anæmia nine months ago, when they began to get scantier and scantier, and at last ceased entirely. The urine is pale and watery, the stools scanty and steadily rare; but there is no sudden gush of bulky stools, diarrhœa alternating with constipation, or other indications of accumulation of feces in the intestines.

She expands her chest perfectly, and there are no abnormalities to give rise to a a suspicion of pulmonary tubercle, at all events in such a quantity as to cause anæmia. There was a soft and systolic murmur in the heart when she was agitated at first admission; but it went away after she had rested in bed five days.

First, now, for the name by which I have already designated this patient's disease. Anæmia, or "bloodlessness," means in scientific language a deficiency of the red disks in the blood. The word has been objected to because it has been supposed to imply etymologically that there is a deficiency in the actual quantity of circulating fluid, of which, indeed, there is no proof. And "Spanæmia," or "thinness of blood," has been proposed in its stead. Such accuracy would be highly commendable, if it were only accurate; but in truth the fact of *thinness* does not describe the essential nature of the disease; for the specific gravity of the blood might be raised as high as you like, but if you did not restore red blood-disks, nothing would be gained; the morbid state would still exist. But, in reality, there is no occasion for fault-finding. Anæmia, by the analogy of Greek etymology, does not mean deficient quantity of blood, but deficient quality, just as in Aristophanes *aprosopos* does not mean a man "without a face," but "with an ugly face," *anarithmos* means "difficult to count," and so on. I shall theerefore contentedly use the term to include all cases in which the blood-disks are beneath the normal proportion.

Anæmia is found during life in a great number of the organic changes of tissues which you see in museums and lectures on morbid anatomy, and may discover by diagnosis. In other cases of equal importance and prominence it is absent. Very frequently, too, you find it in an extremely high degree in cases where you can discover no organic change in the solids at all, and where, from the transitory

nature of the bloodlessness, there is reason to conclude that such organic change really does not exist. Under this last category comes the patient who is the occasion of my present Lecture.

To understand how it is that so many causes are followed by the same effect, and by an effect by no means proportioned to the general importance or want of importance of the cause, you must reflect upon the true relation which the blood bears to the rest of the organism. It is in the same position as a great thoroughfare in an important town. Very little trade, and still less manufacture, is carried on in the street itself, yet from the nature, the number, the pace, and other characteristics of the vehicles and people which pass, you may form a pretty shrewd notion of the commercial prosperity of the population. A foreigner standing in Cornhill and viewing the steady quick pace, and active, careful, yet healthy faces of the many-classed by-passers, the well-packed loads of the vehicles, and their varied yet subdivided contents, cannot fail to see that he is an industrious well-to-do nation. But it is not the mere fact of the crowding that makes him say so, for last Saturday he would have seen a greater crush at the same place though that was only in consequence of all trade being suspended for Lord Mayor's-day. And at Naples, the lazaroni and pickpockets who block up the pavements are evidences that trade is not only suspended, but prevented, by a dangerous horde of villains. So, in the blood, the physician traces proof how constructive metamorphosis (the city's manufacturing industry), destructive metamorphosis (its consumption), and effective life (its social happiness) are carried on.

The traveler must not be deceived by an idle multitude in one spot, in estimating the strength of the population, nor must we set down local congestion as proof of excess of blood. In both cases, experience shows we have strong presumptive evidence of a deficiency.

Neither must a mere bustling throng be reckoned as industrious citizens. There are cases where a large amount of solid matter, even where a large amount of red disks, adds no more to the usefulness of the circulating fluid than the lazaroni to Naples, and which are, therefore, as far as treatment is concerned, really in a condition of anæmia. Of these cases I will speak at a future opportunity.

But though crowds are no evidence of sound political health, yet it is certain that deserted streets prove the contrary. So anæmia, or deficient redness in the blood shows a

deficiency of life in the ministers to that redness; either the supply of food is too small, or its assimilation is defective, in both cases either absolutely or relatively, to the existing demand.

In many instances it is easy enough to lay the finger upon the instrument of life which is to blame. We can detect without difficulty the causes at work—starvation, which anybody can understand, leads to an absence of the organic matters made out of food; disease of stomach, in which the aliments are not prepared for assimilation; disease of liver and duodenum, producing the same result; disease of intestines, or their glands taking up no adipose matter especially, and so preventing cell growth; disease of the spleen or lungs, which physiological experiments, independent even of our observations of morbid phenomena, show to be answerable for the formation of new blood disks in a way yet unknown; mental derangement, care, disappointment, which so readily arrest the activity of the assimilating viscera; these agencies, and many more, are readily comprehended as causes of anæmia. But there are a considerable number of cases where nothing tangible of this sort is to be made out, yet where the paleness of the blood seen in the face, lips, tongue, or in a drop taken from a pricked finger, and evidenced by the faintness, weakness, palpitation, anasarca, amenorrhœa, etc., are even more marked than where demonstrable lesion is to be found. So it is in the present instance. The young woman's history gives no reason to suspect any organic disease of the lungs or other organs, and the functions of life were fairly performed till she began to get pale and languid nine months ago. The want of red blood, which we look upon as the important feature in her case, attracted her attention also particularly, as she had previously had a fresh, high color. Then, after an interval amply sufficient to enable us to separate cause and effect, come the symptoms which I wish to notice as the consequences of anæmia. Causes, no doubt, they are in some instances, but here consequences. I mean the loss of appetite, impeded circulation, cessation of menses, hemorrhage from respiratory mucous membrane, and hysteria in a person unaccustomed to it.

The only explanation she can give of her loss of health is her having been employed in a shop less ventilated than she had been accustomed to, and having the responsibility of the concern thrown upon her. Alone neither would have been sufficient, as the shopwomen under her do not appear to have

suffered from the air; while, on the other hand, women in retail business are not as a rule anæmic. But still I think that both together may perhaps be fairly saddled with the blame, for whilst the increased mental labor was increasing metamorphosis, the greater demand was not responded to by greater supply, but, on the contrary, assimilation was checked by the even moderate unwholesomeness of the respired air.

Of course, the not being able to trace deeper, the anatomical cause arises from the imperfection of our knowledge, but it does not arise from neglecting to apply such knowledge as we possess to practical medicine. If we were to make an autopsy of this patient instead of curing her, we should in all probability find no more lesions in any of the tissues capable of accounting for the disease exhibited in the blood than we have already found. A fortnight ago Dr. Gull, Mr. Malton, and I examined the body of a gentleman who had died at forty-six of anæmia, and made separately microscopical investigations of portions of the several viscera. Nothing abnormal could we find in any part. The typical healthiness of all tissues was very remarkable in a man of that age. There was not even a single adhesion of the pleura. I mention this in order that you may not lament the opacity of your patient's bodies, or suppose yourselves likely to learn how to treat them better if you could see their insides.

Anæmia, without obvious organic lesion, when properly treated, is a very curable condition, and this should still further reassure you, that you miss nothing by not being able to study its post-mortem pathology. For transitory and curable states leave but little foot-prints behind them for morbid anatomists. In a great majority of cases they depend upon the mucous membrane, of all the tissues in the body the one most affected by mortuary changes.

To the mucous membrane I am disposed to attribute the condition in which we find our present patient. The two circumstances to which I have traced the illness both act directly or indirectly on the tissue. The mental exertion involved in an unusual responsibility thrown on a conscientious person would arrest the action of the involuntary muscles which carry along the mass of food through the alimentary canal. You know well the time your food is in leaving the stomach if you are called to an important midwifery case just after a hearty meal; and several commercial and literary men have complained to me of attacks of vomiting (that is, temporary paralysis of the stomach), when they took dinner alone, and

so were apt to let the mind dwell deeply on some interesting subject; and they have told me in wonder that they could dine out and eat and drink all sorts of rich things with impunity. They did not seem aware of the physiological value of frivolous conversation. At the same time that the moral causes thus impeded digestion, the unwholesomeness of the air in the close shop poisoned the mucous membranes, diminishing their vitality and causing them to be abnormally covered with a thick layer of mucus. Remember that, in spite of their name, it is not the business of mucous membranes tosecrete mucus; the more perfect is their condition, the more favora'ble are the surrounding circumstances, the less they do so. From many persons' lungs not a drachm of expectoration is thrown up in a month, and the vast surfaces of the intestines and bladder are equally innocent of even microscopic traces of mucus in the typical health we desire to experience. It is only when the presence of some material agent diminishes their vitality that the mucous membranes exhibit on their surfaces that peculiar substance whence they take their appellation. And the greater the diminution of life, the greater the secretion; a slight cold in the head will be accompanied by slight catarrh, a severe one by excessive catarrh; and the nearer the approach to death, the nearer it is, so that the death rattle, or overpowering collection of mucus in the bronchi, is a popular warning that all is over. Be careful not to look upon mucous secretion as augmented life; it is in fact a partial death.

Well, the poisoning air having covered these slowly moving mucous membranes with a thick tenacious coat, the entrance of alimentary substances into the veins and absorbents was impeded, and our patient starved in the midst of plenty. So all the usual signs of starvation followed. First, hunger—by no means a constant accompaniment of chronic deprivation of food, yet sometimes present as here; then anorexia, a much more frequent phenomenon; then paleness, langnor, weariness, and pain in the stomach; then anasarca, and, in short, the other more marked symptoms of anæmia.

You may observe that the loss in those constituents of the body, which are of a nitrogenous chemical composition, is more marked than that in the hydrocarbonaceous fat. The reason is, partly, that the destruction of adipose vesicles is somewhat concealed by the saturation of the tissue with serum, which gives it a false plumpness—partly, that fat, being absorbable without much, if any, alteration, is easier

taken up than fibrin or albumen which require a chemical solution before they can be absorbed. So that though starved, our patient looks but little emaciated.

All that I have said before, of course has for its end the treatment. My aim in anæmia is to introduce as quickly as I can the largest possible amount of: 1, nitrogenous food; 2, iron; 3, chlorine. When I say "introduce" I do not mean "throw in," or get swallowed, but assimilated in the system.

As regards the first, it is obvious that if I had written down ever so many "ordinary diets," a patient to whom the very sight of food was an abomination, would have gained nothing by it; she would simply have gone without. I directed, therefore, no meals at all, and no solid food, but a cup of milk with some lime-water in it, to be given as medicine every two hours, and a pint of beef-tea in small, divided doses during the day. After two days she managed an egg also daily, and after twelve days of gradual additions of this sort, you will find her on full allowance of mutton chop, porter, beef-tea and milk.

Iron is required to supply the new growth of red disks which we hope for, with their metallic constituent. You cannot get it into the system in any way so quickly as the mistura ferri composita of the London Pharmacopœia. Large doses of the more soluble salts have an action on the mucous membranes which not only prevents them being taken up, but also arrests the digestion of food. Evidence of the latter is found in loss of appetite and feverishness, and of their own rejection in the blackening of the stools much sooner than by the form I have approved of. So in spite of the elegant preparations which are constantly put before us, as recommended by their solubility, such as the chloride, acetate, citrate, phosphate and other salts of iron, I prefer the unchemical mixture. It seems as if the carbonate which is preserved from decomposition by the sugar, and the finely-divided oxides diffused through the thick liquid were peculiarly easy of solution in the water saturated with salts and carbonic acid, which (and not pure water) we must remember is the solvent to be considered.

I have found that some cases which did not improve so quickly as I could wish under the above treatment, made a sudden start of improvement when to it was added the administration of chlorine in the form of warm hydrochloric acid baths. More iron is taken up—the blackening of the feces ceases, and therefore perhaps it may be that the presence of more acid in the system attracts more of the metal. But in a

few cases I tried for experiment the hydrochloric acid baths alone, and even then it was beneficial, seeming to confer muscular strength like what are commonly called tonic drugs. I cannot but think, therefore, that it supplies a distinct want in the system, that it is a directly restorative medicine in anæmia.

Nor is it difficult to make this empirical observation accord with rational pathology. In anæmia the blood is more watery than natural; the proportion is deficient, not only of organic matters, but of salts. Chloride of sodium is the most important of these, and the supply of one of the constituents of this material we may personally imagin is an aid to the renewal of life, which is the end of all medication.

Besides the above named medicines, you will see, I have ordered Pil. aloes cum myrrha, gr. iv, omni nocte sumenda. Now, do not suppose that this is ordered merely as a purgative, and that any other purgative would do as well. On the contrary, most purgatives do harm in anæmia. Gamboge, castor-oil, sulphate of magnesia, colocynth, mercury and several others, which produce serous elimination and augment secretion generally, would do harm just in proportion to their activity. It seems established by the experiment of making them as purgatives when injected into the circulation, that their soluble principles have a destructive agency over the blood; whereas the soluble alkaloid in aloes (aloine) is, in fact, a bitter tonic, and the purgative power of the drug resides in its insoluble resin.* Its action is very slightly eliminative—in moderate doses it only slightly augments the solid brown excreta of the colonic glands, and produces feces feculent in smell and of consistent form; whilst at the same time it restrains, by its bracing bitter, the formation of mucus, as you may clearly see by its action on moist piles, how it dries them up and make them smart. And by the more vigorous peristaltic action and by the solid mass passed along the gut, the already existing mucus is cleared away. Aloes, therefore, is employed strictly as a clearer of the intestinal, especially of the colonic, membrane. It is joined with myrrh, partly to divide it minutely, and make a small dose go further; and partly to get the advantage of the extra resin.

November 28. A fortnight ago I lectured about an anæmic patient. She was then showing a tendency to lose her title to the name, and now she certainly cannot claim it, and has earned our confidence in the statement that her natural hue is rosy.

* "Headland on the Action of Medicines," p. 331; and Robiquet in *Journal de Pharmacie*, April, 1856.

She leaves the Hospital to-day, having manufactured enough red disks to colour her blood throughout very sufficiently.

What amount of manufacturing industry does this show? Let us reckon. She weighs 8 stone, or 1792 ounces; of this 2-7ths, or 512 ounces is blood; and of this blood 133-1000, that is to say, 60 ounces should be red globules. Now the analyses of MM. Andral and Gavarret show that in cases of anæmia of at all a marked character (as this was), we may expect, at least, three-quarters of the red disks to disappear, so that when she came into the Hospital it may be fairly assumed that she did not possess above 15 ounces; and now I think with equal fairness she may be assumed to have got up to 45, which is conceding that she still wants a quarter of perfect health. By this reckoning she must have made 20 ounces of red blood disks; that is, the most important organic constituent of upwards of 150 ounces of blood, in a month!

Mark the power of renewal which the human body has under favorable circumstances, and learn from this not only the curability of anæmia when it is a disease, but also the facility of repairing artificial loss of blood when it is employed as a remedy. It has been the fashion lately among certain medical declaimers to paint the Physician who draws ten or twelve ounces of blood from the arm as a deadly villain, who necessarily *ex vi termini* takes away "the life," or that which cannot be replaced. Not only pill-dealers and quacks have raised this outcry, but it has been joined in by some whose knowledge of physiology ought to have taught them better. It ought to have taught them the fallacy of the popular notion and the scientific argument by which to refute it. You will clearly perceive from the calculations through which I have taken you, that by proper management no loss is so easily repaired, and that if he saves his patient two nights' sleeplessness or pain, the price of a venesection is well spent.

Only note this, that *if the loss is to be repaired, the means of repair must be given.* When I bleed, you will observe that I take down the diet card and accommodate it to the circumstances, being very careful that the patient has the wherewithal to replace the globules I am detracting. I supply with one hand what I am taking away with the other. I begin to cure the artificial anæmia, which I feel myself called upon to produce, at the same time that I am producing it. "Blowing hot and cold," you will say. Precisely so—that is what I intend. I blow cold with my bleeding, not for the sake of blowing cold, but because it is the inevitable accompaniment of the remedy.

I employ the remedy not to produce anæmia, but for other quite different purposes which I think are worth the cost. And I blow hot to compensate as well as I can for the evil I think it desirable to do, on the principle

"Necesse est facere sumptum, qui quærit lucrum."

I do believe the sad effects of the excessive venesection of our fathers, which, with justice, have been thrown in the teeth of the Medical Profession, was due quite as much to starvation as to the bleeding. I have a most vivid and painful recollection of seeing, when I was a student in Paris, M. Chomel and others treating pneumonia. I could not at first understand why in France so much more marked, and, in my opinion, so much more deleterious, effects were produced by the venesection than in England. At that period we had at home ample opportunities of seeing blood-letting practised; but I never saw such prostration produced by it at St. George's as I did at the Hotel Dien. Then I noticed that the order for "*Saignee*" was accompanied by "*Diete absolue.*" I almost doubted my knowledge of French, and was obliged to ask several of the bystanders before I could believe that this meant an *utter deprivation of all food!* There was an instantaneous explanation of the comparative toughness of my countrymen; for never in our worst days did we carry the Sangrado practice so far as that. We did not give food enough, perhaps, but we never commanded that it should be intentionally kept out of our patient's way.

The bad practice of starving and bleeding at the same time, took its rise from the errors of Allopathy. In this system a disease is an enemy to be overcome—a something *to be combated by* an agent which is as opposite to it as possible. Bleeding was found by experience to be useful in certain morbid states; therefore it was useful in virtue of its opposite effects. Anæmia and depression of life, are the most constant effects of bleeding; therefore anæmia and depression are the benefactors to be sought for, and whatever aids bloodletting in producing anæmia and depression, is a good companion to it. It is unnecessary to say, that of course starvation was the first agent thought of, adopted *à l'outrance* by the logical French, and with more hesitation by our fortunately illogical countrymen. The abuse has brought about a reaction; and that treatment which was considered at one time so specific that its gravest faults were viewed as virtues, now runs a risk of being denied *all* virtue because of its avoidable faults.—*Med. Times and Gazette, Jan.* 11, 1862.

EMPLOYMENT OF NITRIC ACID AND OPIUM

FOR THE TREATMENT OF THE AUTUMNAL FORMS OF DIARRHŒA AND DYSENTERY.

By PATRICK J. HYNES, M. D., Nottingham.

The periodical recurrence of these well-known visitants is so certain as to become almost "as familiar as household words;" in fact, to such an extent is this the case, that medical men in extensive practice, enjoying, as it were, an interval of comparative repose during the summer months, from the fatigue consequent upon their attention to the host of diseases of the pulmonary organs inevitable in the cold and dampness of our climate, buckle on their armor to combat, each in his own peculiar fashion, with an enemy which is, if we may judge from the present rate of mortality in the metropolis, (*vide* the Registrar General's "Return" of the 17th inst.,) of an equally formidable character.

I am not going to write an elaborte article upon the above diseases, since the numerous treatises that abound describe the various stages and symptoms of these complaints; but my object is to bring *more prominently* forward a remedy, which, although it is by no means a new one, still I think is not generally employed; and I am bold enough to hope that its more extensive use in the hands of the medical gentlemen of the metropolis would have the effect of mitigating much of the present rate of mortality. About ten year since diarrhœa and dysentery prevailed rather extensively in this locality, and emboldened by the successful treatment of these diseases from the remedy I was in the habit of employing, I ventured to bring it, through the medium of the public journals, into notice, and since that time I have been repeatedly assured by many gentlemen who adopted it that my opinion of its efficacy has been by no means exaggerated. I believe I am indebted to the works of Dr. Abercrombie, "On Diseases of the abdominal Viscera," for the formula I am in the habit of employing; but as I write from memory, and have not an

opportunity of confirming my opinion on this point by a direct reference to that excellent work, I do not wish to deprive any other author of whatever merit may be found to attach to its introduction as a remedy for those diseases.

I may observe that during the last four or five weeks diarrhœa has been very prevalent in this locality, and I do not overstate when I assert that I have used it in more than a hundred cases already, and always with almost instantaneous benefit. The formula that I generally employ is as follows: Compound infusion of gentian, eight ounces; tincture of opium, a drachm to a drachm and a half; nitric acid, twenty minims; one ounce to be taken after every liquid stool or painful alvine evacuation. A mustard plaster applied to the epigastrium, and drinking sparingly of ice-cold mint-tea, relieve the sickness and thirst that frequently accompany the severer form of these diseases. I have found the remedy equally beneficial in some rather intractable form of dysentery. I would strongly urge upon gentlemen, who meet with dysenteric cases, to give it a trial, as I feel satisfied they will find it a very powerful curative agent in their hands.

In an old number of the *Medical and Physical Journal*, from which I several years since made an extract, I find the following from a Mr. Hope, of Chatam, He says:

"The first occasion of its use was remarkable. A young man of sobriety and temperance, had suffered long with dysentery, and had been attended by a friend of mine for some time, who recommended those remedies that high authority and experience pointed out for relief; but finding no advantage, he sent for me, expecting more might be done. Nothing, however, recommended was successful, and, as I could but go over the same ground, no prospect of relief appeared; indeed his death was daily expected. At this time a woman who lived with him was attacked with dysentery, with extreme thirst. An acid occurred to me; but, fearing that it might produce unpleasant effects, opium was added:—Nitric acid, two drachms; opium, two grains; water, two ounces; a spoonful to be taken in any vehicle three or four times daily. The effect produced was so great that my dying patient, unknown to me, begged to partake with her, and when I saw him next morning, which to my great surprise was with a cheerful countenance, he told me if ever I had a patient ill with his complaint, I should never fail to send the drops I had sent for the woman, for they had relieved his complaint at the first dose, and he was sure he should mend now, for they had saved his life this time.

This was the only medicine he took, and in a few days he was able to walk about his room. In a third case I tried the acid without the opium, but it did not succeed. I then united them and it effected immediate relief. I was still unwilling to persuade myself into a belief of its being a specific remedy, until a case of so extraordinary a nature occurred as compelled me to decide unequivocally in its favor. A young lad, sixteen years of age, fell over a dredging-boat into the water, in the month of July last. Indisposition succeeded, but to what degree I could not determine, as another practitioner was at first called in to his assistance. This was near a month after the accident. The remedies I applied failed in their efficacy. His friends, dispairing of relief, requested me not to trouble myself to attend him any more (they lived six miles from me) saying he must be left to his fate, being assured a day or two more would finish the scene. At this time I recommended the anodyne, and with great difficulty it was that they could be persuaded to give it a trial. Twenty-four hours had not elapsed before he began to find relief, so that in four hours he let off the remedy. The disease returned; reapplication of the drops again removed it, and in a very short space of time, without any other medicine intervening, he became as healthy as he ever had been. The manifest advantage of the medicine was recognized by the parents; nor did they spare unjust reflections that I did not employ it before."

I am unwilling to theorize upon the *methodus medendi* of what I believe to be the principal agent in the above formula; yet I cannot help thinking that the nitric acid possesses some disinfecting agency, no less than an astringent efficacy, over autumnal diseases. "The fumes of nitric acid are believed to be efficacious," says the late Dr. Montgomery, "in destroying the effluvia of typhus and other febrile diseases." Diluted with water so as to form an assidulous drink. Dr. Duncan of Edinburgh used to employ it in the low fevers that prevailed in the suburbs of that town. But independent of its chemical action over animal effluvia, it appears to me to act as a direct astringent in all the diseases of the mucuous membrane. Thus in purulent opthalmia, what remedy is so efficacious as nitrate of silver in solution? In fact, in all mucuous discharges it is almost the sole remedy upon which the surgeon depends; and of course the nitric acid is the chief agent in this valuable therapeutic. I am in the habit of employing a formula of a nearly similar kind as a tropical application, but with double the amount of acid, in cynanche and in diptheria; and I can speak

very strongly upon its beneficial effects. In brokendown constitutions impaired by mercury, by syphilis or other irregularities, the above remedy will be found frequently valuable; and given in combination with taraxacum, it will prove very serviceable in sluggish conditions of the liver. I am in the habit of employing it with very considerable advantage in the diarrhœa of infants, and, combined with the muriated tincture of iron, in tabes mesenterica. I may further state that I have given the other acids, singly and in combination, the full benefit of a fair trial in all the above forms of diseases; and, without any prepossession or prejudice, my experience enables me to give a decided preference to the claims of the nitric acid in combination with opium, as a very superior therapeutic remedy. I have not had an opportunity of making trial of it in the the very severe forms of epidemic cholera, although I have had ample opportunities of treating that disease. I have, however, many years ago, tried extensively, *inter alia*, the plan of treatment recommended by Dr. Toulmin, of Brighton, thus anticipating his views (see the *Lancet* for Nov., p. 301), which certainly look well in print, particularly as they are eloquently, indeed elegantly, introduced; but when weighed in the balances they will be found wanting.

In conclusion I may observe, that the large mortality which these diseases bring in their train calls for all the curative agency the profession can muster to encounter their fatality. I am vain enough to indulge the hope that more extensive employment of my suggestions may not be altogether useless; and, in the unassuming language of the Roman writer shall say—

"Si quid novisti rectius istus
Candidus imperti, si non his uteria mecum."

—*London Lancet.*

ON THE CONDITION OF THE MOUTH IN IDIOTS.

By J. LANGDON H. DOWN, London,
Physician to the Asylum for Idiots, Earlswood.

The condition of the idiot is not simply one of mental alienation. It frequently presents also grave physical deterioration; and this physical alteration is as much of idiocy as

is the low condition of mental power. In a community such as that of the Earlswood Asylum there is to be found every variety of imbecile mind. In fact, just as in the outer world, there is a graduated series from the most commonplace intellects—who are 'the hewers of wood and drawers of water'—up to the giant minds that leave their impress upon the age in which they live; so is there among an imbecile population a gradual shading in an inverse direction—from the youth who might, if he had property, become the subject of inquiry before a master in lunacy, to one who, with every means of communication with the external world, except feeling, closed, vegetates in impenetrable mist. In such a community one can perceive the grades of physical condition accompanying the mental phases; and a study of the physical anomalies becomes as interesting and important as that of the psychological state. When contemplating so large a number as that which Earlswood shelters, one is able to set some of the members aside into natural groups, by simple reference to their physical state, and to predicate from that state what will be their probable future mental improvement. There is scarcely an organ in the body but may be found gravely altered in idiots; the circulation and respiration are abnormal; the skin exhibits perturbed functions; defective innervation, lesions of motility and nutrition, are abundantly met with; the bodily conformation is often of an aberrant kind. Regard, therefore, should be paid, in all cases of diagnosis of idocy, to the physical condition as confirmatory of any opinion based on purely psychological data. It is in this way one is enabled to differentiate an idiot from a simply backward or ill-regulated child. It is from the conviction of the importance of a study of the physiological manifestations of idiocy, that I have been induced to devote no small portion of time to an investigation into the structure and functions of the various organs *seriatim* among idiots and imbeciles. I purpose in the present paper giving some of the results of my observations of the feeble-minded, in reference to the condition and conformation of their mouths. Characteristic as is this region of various transitory mental phases among the sane, does it bear the permanent impress of a state in which the mind has failed in attaining its normal condition? If so, what is the nature of the impress? Does any value attach to the conformation of the mouth as confirmatory or otherwise of a state of mental incapacity? These are some of the questions we have to solve. I may premise that these observations have been made during the past year,

without reference to any recent legal inquiry, and extend over 200 cases, which have been taken, without any special selection, from a large number. Not one on the list would, in the present condition, be able to manage his own affairs, or be legally held to be responsible. Many of them, however, are susceptible of considerable culture, are affected by the amenities of life, write letters to their friends, make small purchases, and form friendships. Several perform mechanical work with system and order. One, although possessing very little judgment, has been taught French and Latin, and reads these languages as well as ordinary schoolboys. Some few possess extraordinary memories and special aptitudes. One hundred and forty-six were males, and 54 females. Their ages ranged from 7 to 36.

Palate.—Among the 200 cases included in this inquiry, 82 possessed palates inordinately arched, and with this increased arching were noticed various abnormities. In some the palate was unsymmetrical, two sides having different degrees of concavity, or one side plane and the other concave. In 34 the palates were excessively arched, approximating to the appearance of the roof of a house, and with this extreme angularity was great narrowness. Excessive arching of the palate occurred, therefore, in 58 per cent. Excessive flattening of the palate was observed in 4 cases. In 34 cases, or 17 per cent., the palate had a very prominent antero-posterior ridge or keel corresponding to the line of approximation of the palatal bones. In 7 the plate bones did not meet, leaving a sulcus between them, the mucous membrane being, however, continuous. There was no instance of the ordinary cleft palate; and I may remark that, in an examination of nearly 600 idiots, I have failed in meeting with an example of that deformity. In several the hard palate extended but a short distance posteriorly, from defect of the palatal process of the superior maxillary bone and entire absence of the palatal process of the palate bone; and in all these cases the velum palati was unusually flaccid. In the majority of cases there was marked narrowness of the palate.

Thirty-three per cent. do not exceed 1 inch, and 62 per cent., while being more than 1 inch, do not exceed $1\frac{1}{4}$ inches; whereas the normal average has been stated to be $1\frac{1}{2}$ inches. It is worthy of notice that these numbers hold no direct relation to the age or stature of the patients examined. Thus, in a youth twenty-two years of age, and 6 feet 1 inch in height, so narrow is the palate that there is only 1 2·24th of an inch

between the bicuspids, and only 10-24th of an inch between the opposite gums at their widest interval. The lowest measurements occurred in a boy and girl, the boy twelve, and the girl thirteen years of age. Neither is there a direct relation between the width of the palate and the cranial capacity; for in a microcephal whose palate was 22·24th of an inch wide, the internal canthi of the eyes were 23·24th of an inch distant from one another; while in a macrocephal whose palate was 22·24th of an inch wide, the distance between the internal canthi amounted to 2 inches.

Teeth.—The principal characteristics of the teeth in idiots are, that the period of the first dentition is delayed, the second dentition considerably postponed, and that they undergo very general and rapid decay. In many cases the anterior surface of the incisors presents a honeycombed appearance, but in no one instance have I observed those special characters which have been well shown by Mr. Hutchinson to be significant of congenital syphilis. In a large number of cases they are developed irregularly, are crowded, and the canine occupy a different plane from the other teeth—all these irregularities resulting from the imperfect development of the superior maxillary bone. In 6 cases, or 3 per cent., the upper incisors projected to such an extreme degree as to produce grave deformity. In 7 cases, the teeth of the lower jaw were in advance of those of the upper.

Tongue.—The most prevailing character noticeable in the tongue of idiots is the hypetrophy of the fungiform papillæ. Undue prominence of the papillæ was observed in 101 instances. In several there is a marked want of co-ordination in the movements of the tongue, so that the patient, although endeavoring to comply with the request, is unable to protrude it. This condition is usually associated with an absence of general co-ordinated movements, and in the improvement which is effected by treatment it is usually the most persistent derangement of motility. In 16 cases the tongue presented a soddened appearance, and exhibited deep, transverse furrows on its dorsal surface; in all these patients one is able to trace a marked physiological and psychological agreement, and so much do they resemble one another in these respects, that they might readily be taken for members of the same family. Inordinate size occurred in 12 instances, and in almost every case was associated with defective power of articulation. In 2 the tongue was unusually long; 33 were mute, 16 semi-mute. In 83 the speech was indistinct; in 62 the speech was fair. Stammering was observed in 4.

Tonsils.—One cause of the peculiar speech prevailing among idiots is the condition of the tonsils. These observations, for the most part, were made in the summer, when the tonsils were not likely to be rendered worse than their usual condition by climatic influences. In 30 instances they were injected; in 17 slightly enlarged, in 79 considerably enlarged; and in 5 so much increased in size as to interfere with deglutition and respiration.

Mucous Membrane, etc.—Besides the injection of the mucous membrane of the tonsils which has been noticed, other regions of the oral cavity are liable to this condition. The velum palati, uvula, and pillars of the pharynx were found to be thus characterized in 27 instances. The posterior wall of the pharynx was observed to be marked by considerable vascular injection in 33 cases, and in 6 the mucous membrane had assumed a granular appearance. The buccal and labial glands were generally hypertropoied, and the salivary glands were frequently enlarged. In 11 instances the sublingual gland was *greatly* enlarged. The uvala was elongated in 14 cases, bifid in 2, very short in 1, and entirely absent in 1. The lips were hypertrophied in 2. In 1 case only were the gums noticed to be swollen and tumid—a circumstance arising probably from the abundant supply of fresh vegetables with which the patients are provided.

Slavering.—The flow of saliva from the mouth is universally associated, in the popular mind, with the condition of idiocy. The slavering may vary in degree. It may occur only at periods of excitement, and at meal times, or with scarcely any intermission throughout the day, producing, in severe cases, excoriation of the chin. Among 325 cases which I have examined, I find 72, or 22 per cent., in which this habit was noticed. Of these, 28 slaver to a slight extent, 17 rather more so, and 26 in an aggravated degree. This peculiarity depends, I believe, on two or three causes—1st, the increased secretion of saliva; 2d, the deformed condition of the mouth; 3d, the want of co-ordinated movements in the muscles of the tongue; and 4th, the absence of tonicity in the labial muscles. Seeing that slavering exists in 22 per cent. of imbeciles, the question may arise—Is it confined to this section of the community? I am not prepared to say that it is never associated with mental vigor; but I believe that, excluding childhood, old age, disease of the mouth, and neural lesions, slavering is very rarely unconnected with mental imbecility. Moreover, I have examined, with reference to this question, 1000 persons who

are doing the everyday work of the world, without meeting with a single example.

Summary—We have thus seen that idiocy is not simply a cerebral lesion; that it carried with it marked physical deviations, of which I have shown conspicuous examples in the mouth; narrowed, arched, and unsymmetrical palates; tardily developed, irregular, and rapidly decaying teeth; a hyperæmic condition of the mucous membrane and glands; elongated uvulas and hypertrophied tonsils; large, enervated, and rugous tongues, deficient in co-ordinated movements and in their special function; saliva secreted ordinately, and retained incontinently. Such are some of the characteristics of a class in which mental vigor is an abeyance, which should be taken in connection with the psychological state in diagnosis, and inculcate the doctrine that the physical condition of these unfortunates should be specially sought to be ameliorated by an improvement of their physical condition.—*Abridged from Lancet.* (*Dublin Medical Press.*)

PYROPHOSPHATE OF IRON.

By JAMES R. NICHOLS.

Prof. Chapman's valuable paper upon the citro-ammonio-pyrophosphate of iron, published in the *Journal* a few weeks since, has awakened an unusual interest among physicians, and led to a large demand for the salt. Modern chemistry has given to the world many new compounds, some having names so truly formidable, that they are not a little puzzling to medical men, especially those whose chemistry was learned in the schools of a quarter of a century since.

It is not a matter of much surprise to find an excellent and venerable physician ordering *phyrotechnate* of iron, when we consider the unfamiliar name of the desired agent, and the haste to procure it, induced by the warm praise bestowed by Prof. C. Neither do we wonder at the inquiries of another, who wishes to know if the new sanitary pyrotechnic is not dangerous, or liable to spontaneous combustion, as *pyro* means fire, and phosphorous, a prominent constituent, can hardly be kept from setting one's saddlebags in a blaze unless protected by water.

It is important that names and therapeutic agents, should be precisely understood. Pyrophosphate of iron, correctly

speaking, is the white precipitate formed when a solution of iron ($2\,Fe, O_3, 5SO_3$) is added to another of bibastic phosphate of soda (PO_5, 2 Na O). As a dry white powder it has been to some extent sold as pyrophosphate of iron. The salt described by Prof. Chapman, and which is inquired for as pyrophosphate of iron, bears physically no resemblance to this article, and as regards chemical constitution, varies widely from it, it being only one of its constituents. The citro-ammonio-pyrophosphate of iron, as described in the *Journal*, affords scales of beautiful light-greenish color, but if a slight amount of ammonia is added to the solution, a reddish-brown color is produced, and the dried scales are made exactly to resemble those of the citrate, or tartarate of iron. A salt of this description is the market, called pyrophosphate of iron. The medicinal effects of this preparation would in no respect differ from the other, but its physical character is so unlike, that confusion and doubt are liable to arise from similar agents existing under dissimilar forms.

It will be understood that the shops afford three distinct articles—one a dry white powder, another in brilliant green scales, and still another in red scales—all of which pass under the general designation of pyrophosphate of iron. To avoid very long names, and secure uniformity of physical aspect, I would suggest that medicinal pyrophosphate of iron be regarded as the preparation obtained by dissolving the moist white precipitate, before alluded to, in an exactly neutral solution of citrate of ammonia, or soda, and which affords scales and syrup of the elegant greenish hue. There are some apparently valid reasons why soda should be introduced into the preparation rather than ammonia.

The earthy portion of bones is essentially a tribasic phosphate of lime, and the principle of blood which affords an alkaline reaction is a tribasic phosphate of soda with two eqs. of fixed base and one eq. of basic water (PO_5, 2NaO HO). The chief salt in the juice of flesh and in the gastric juice, is a tribasic phosphate of potash, with one eq. of fixed base and two eqs. of basic water (PO_5, KO, 2HO. No one can doubt that each of these peculiar phosphates has important functions to perform in the animal economy, and their presence in abnormal quantities may be fruitful sources of disease. Soda performs a much more important part than potassa, inasmuch as it is found directly in the circulation. The principal salt in the blood to which it owes its peculiar power of absorbing and giving off carbonic acid, is a tribasic phosphate of soda, as

has been stated, and therefore it may be as intimately connected with vitality and health, as iron. To what extent vital force is capable of breaking up complex salts directly administered, and forming new ones adapted to the wants of the system, is a point upon which we need information. We also need more light as regards chemical agents, or combinations best adapted to effect certain morbid conditions of the animal economy. The phosphatic salts certainly play a very important part in the chemistry of life, and that with the soda base is particularly prominent. Hence it is inferred, that when we desire to introduce a salt of phosphoric acid as a remedial agent, and it becomes necessary to associate therewith an alkali, soda or potash should be selected in preference to ammonia, as this latter is not found in the blood or tissues, and is only formed from their decomposition and decay.

In the phosphate iron salt under consideration, it would seem preferable to use soda with the citric acid in rendering the same solnable. Citrate of soda dissolves the freshly-precipitated pyrophosphate of iron as readily as the ammonia salt, and the resultant scales and syrup are equally as beautiful and tasteless.

The pyrophosphate of iron under consideration, is a sesquioxide salt, and what degree of ready assimilability it may possess, is not as yet, I presume, fully ascertained. Doubtless, it is a valuable agent, but how much more than the numerous other sesquioxide combinations of the metal, can only be learned from extensive trial. Its freedom from unpleasant taste is certainly in its favor.

When it is desirable to administer phosphorous compounds with iron, I am inclined to think a lower oxy-salt of the element, with one of the iron containing also a less amount of oxygen, is to be preferred. The hypophosphite of the protoxide of iron, in the form of syrup, is a stable compound, and possesses the least possible ferruginous taste. In the limited trials to which it has been subjected, it has proved to be remarkably prompt in its tonic and chalybeate influence, and indeed we should expect this, from what we positively know of the behavior of mineral salts under the influence of vital chemical action.

The pyrophosphate of iron, as Prof. C. suggests, is best given in the form of a thin syrup, which may be prepared from the original solution, as made ready for drying. That containing eight grains of the anhydrous, or fifteen of the combined salt, to the fluid ounce, given in teaspoonful doses, affords about the requisite amount for adults.—*Boston Med. Journal.*

EDITORIAL AND MISCELLANEOUS.

Meeting of the State Medical Society—Postponement of the Meeting of the Am. Med. Association.—The attention of the profession is directed to the subjoined notices which have been enclosed to us for publication.

At the last meeting of the State Medical Society it was made the duty of the Secretary to call the meeting for this year in the month of May, contingent upon the assembling of the American Association at that time, otherwise to call it in the month of June.

The Committee of Arrangements of the National Association, having (as we conceive wisely) concluded that the causes which led the postponement of the annual meeting last year still operated, and with perhaps greater force, and therefore having determined upon still another postponement, the result is that the State Society will not meet until the time announced below.

The importance of bearing these changes in mind will be apparent to all who intend coming up to the annual gathering, which, it is to be anticipated, will exceed, both in interest and numbers, any previous anniversary of the Society.

Meanwhile we must be permitted to congratulate the members of the American organization that their Committee of Arrangements have not been tempted into a premature rally of the Association by the ill-advised urgency of a few individuals who seem even yet wholly unaware of the terrible

struggle for mere existence in which the nation is now engaged. It is enough to say wiser councils have prevailed.

ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

We, the undersigned, Committee of Arrangements of the American Medical Association, after free consultation with officers and members in each important section of the country accessible to the Committee, feel constrained to give notice to the Profession, that the regular annual meeting of the Association is further postponed until the first Tuesday in June, 1863.

Chicago, March 20th, 1862.

N. S. Davis,
J. Bloodgood,
J. W. Freer,
DeLaskie Miller,
H. W. Jones,
E. Andrews,
Thos. Bevan,
} Committee.

ELEVENTH ANNUAL MEETING OF THE ILLINOIS STATE MEDICAL SOCIETY.

The regular annual meeting of the Illinois State Medical Society will be held in Jacksonville, commencing on the first Tuesday in June, 1862. A full attendance of delegates and members from all parts of the State is very desirable.

Chicago, March 3rd, 1862.

N. S. Davis, Permanent Secretary.

An Error Corrected.—The *Lancet and Observer* errs in its statement that Rush Medical College did not continue its last session through the usual period. It falls into this error, possibly, from the fact that the last session *commenced* two weeks earlier, and of course closed two weeks earlier than previously had been the custom. The session continued uninterruptedly from the first day to the very last day of the usual period, and, we are happy to inform our contemporary, was attended by more than its usual average of students. Of which latter fact the forthcoming catalogue and announcement will be full evidence.

The change in the time of commencing the annual session was made at the solicitation of a large number of students, and has been found practically so convenient, that it will probably become permanent.

So far from abbreviating the lecture season, or wishing to do so, Rush Medical College stands ready to coincide in any well devised or general movement for increasing the length of terms. But be it observed, it does not believe in taking out of the body what is put on the extremities—spreading the same number of lectures over a greater space of time, thus encouraging indolence both in the teacher and the pupil. From that sort of reform it begs to be excused.

Pyro-Phosphate of Iron:—Several correspondents inquire where this preparation (an article concerning the merits of which was contained in the last number of this journal) can be procured of a reliable character. It may be that other parties have it, but we have been in the habit of ordering it from Mr. E. H. Sargent, corner of State and Randolph streets, in this city, who puts it up in most excellent style.

The article is an elegant one, and one which cannot fail to become popular among those who have an eye to æsthetics in medicine. It avoids the nauseous inky taste of the chalybeates generally, is agreeable to sight, taste and smell, and usually acceptable to the stomach. We say usually, for in a few instances it has seemed to provoke colicky pains and diarrhœa when given in full doses. This has once or twice necessitated the exhibition of aromatics, etc., and even temporary discontinuance of the medicine. Whether the phosphorus in its composition has the remarkable efficiency asserted for it by Dr. Chapman, we are inclined to doubt; but its chemical characteristics certainly suggest it for trial in many peculiarly intractable cases.

Penetrating Wound of the Lung.—Prof. E. C. Lane, in the *San Francisco Medical Press*, records a very interesting case

of punctrred wound of the lung, the knife entering between the second and third rib, near the sternum on the left side. The rush of air in and out of the wound, and the gush of blood, are graphically portrayed. The successful treatment involved as its striking characteristic the careful removal of the extravasated blood from the pleural cavity *immediately*, and not as generally directed, closing up the wound and allowing it to remain till some days afterwards. He observes: "The rapid convalescence of the case, the escape from pulmonary inflammation, together with the avoidance of empyema—which would have been the event of the opposite course of treatment—would induce me to evacute, *instanter*, blood from the thoracic cavity, in all cases of wounds penetrating it, and accompanied by internal hemorrhage.

Germain to this point, we recall attention to the interesting cases of gunshot wounds of the lungs reported in this journal in February, 1861, by Dr. Clapp, now of California.

A Treatise on Gunshot Wounds.—By T. Longmore, Esq., Deputy Inspector-General of Hospitals; Professor of Military Surgery at Fort Pitt, Chatham. Philadelphia: J. B. Lippincott & Co., 1862. 132 pp.

This little *brochure* is one of the books which sum up in brief the results of extended and diffuse observations. Without any especial claim to novelty, it affords a valuable, clear and concise discussion of gunshot wounds in general, as modified in effect by the peculiarities of particular parts and also practical directions for treatment.

It will be found useful not only to the Army Surgeon, for which it appears to be specially designed, but also for students and practitioners in civil life.

Braithwaite's Retrospect.—Part the Forty-Fourth.—Notice of the appearance of this valuable reprint was accidentally omitted in the last number of the JOURNAL. It fully sustains the previous high character of the series, and will be found rich in practical information. All the booksellers have it.

Anatomy, Descriptive and Surgical.—By Henry Gray, F. R. S., F. R. C. S. and Lecturer on Anatomy at St. George's Hospital Medical School. With Drawings by H. V. Carter, M. D., Demonstrator, etc. Dissections jointly by the author and Dr. Carter. Second American from the revised and enlarged London Edition, with 395 engravings on wood. Philadelphia: Blanchard & Lea, 1862. 816 pp.

With the previous edition of this magnificent work every anatomist is familiar. We are certain that we do injustice to no author when we say that it is pre-eminently *the* anatomical text-book. The general outline verges upon the absolutely perfect; particular descriptions are minute, lucid and exact, and the style throughout a classical model.

The engravings will arrest the attention of the most superficial observer for their boldness and strength; and they will command the admiration of the most critical for their perfection and beauty.

They have one peculiarity which conduces materially to convenience and perspicuity. The name of the part or point of interest is depicted immediately in its place on the engraving in such a manner, that while nothing is detracted from the perfection of the engraving, the student is not compelled to wade through foot-lines and a chaos of numbers or letters to find exactly the nomenclature of the parts.

Throughout the work, special attention is given to the surgical relations of every part, to such an extent, indeed, that the work is made indispensable to the practical surgeon. By the aid of the complete index, and the mode of indicating parts on the engravings, not a moment's time need be lost in referring to the anatomical and surgical relations to be studied. A brief account of the microscopical anatomy of some of the tissues and the various organs is also introduced.

In the present edition, inaccuracies have been corrected, "much additional matter has been added to the text, and several new illustrations executed with great care and fidelity by Dr. Westmacott, have been inserted."

The American edition has received the careful and judicious

supervision of Dr. Richard J. Dunghican, and the name of Blanchard & Lea is sufficient guarantee of the typographical excellence of the volume. For sale by W. B. Keen & Co. and by S. C. Griggs & Co., Lake street.

Characteristics of Parisian Notabilities.—The most attractive lecturer at the college is certainly Malgaigne on operations and apparatuses. The speciality is admirably fitted for him as permitting of digressions into witticisms of the most bitter nature against inventors in general, and old Charriere in particular, who, by the way, is generally alongside. He is certainly the grand leveller. Few operations or instruments are better than blunders, his own excepted, and these invectives are uttered so eloquently, so beautifully sarcastic, that his hearers fail not to evince their appreciation in applause frequent and sincere. Many of the audience are non-professional, mere listeners indeed, who have no interest other than to hear the irony and watch the grimaces of this most peculiar speaker. He has such a crabbed appearance, and the contortion of his features as he is upon the point of saying something severe is so singular and unnatural, as to be comparable only to face of a snarling dog. A student ignorant of the language can tell when he bites. As a debater he is powerful and fearless, and in the meetings of the Academy of Medicine invariably puts down his antagonist.

Denonvilliers is perhaps the next most popular as a lecturer, and it must be by reason of his very oppositeness to his colleague, for no two men were ever more different than Denonvilliers and Malgaigne.

Jarjarvay makes the hour pass pleasantly, notwithstanding the difficulty of his subject.

From among the clinical professors Trousseau must be chosen as the true orator. Indeed this ought to be his forte, for in early life, besides being a legislator, he was professor of rhetoric. Few men are more admirable for both talent and exterior looks. In manner and appearance he reminds me greatly of Dr. Willard Parker.

Jobert de Lamballe is surgeon to the Emperor, and is besides as unfeeling as a Maisonneuve. He seems never pleased, for ever growling at his aids, doing everything but kicking them, and patients in his wards are scolded at like dogs.

What a contrast is the gentle Nelaton! All mildness with

his assistants, and showing extreme sympathy for the sick. The largest *clientele* lies between him and Trousseau. I am told that Nelaton's income is about 200,000 francs.

Velpeau has been now so long walking the wards, and so long famous, that to foreigners in particular he has become a perfect curiosity. He is about the first one that the American student just arrived asks to be shown to. In a recent visit to Tours I understood that his studies were begun there, but so long ago that the oldest doctor did not remember. He has more internes and externes under his care than any other, especially of Spaniards. The crowd after him is so large that it is nearly impossible to see more than every fourth bed. He is familiar and kind to every one.

Piorry is called a great oddity with two great hobbies—the making of new sounds by his fingers, and new names with his tongue. For those who have faith to the very finest point in percussion he must be their king. As an instance of his perfection I may mention that I have known him to percuss the spleen some few hours after giving quinine, and detecting a diminution of its volume! He uses simply the pleximeter, to which he has given some new name which I forget. While percussing he never listens, at least scarcely ever. The *tactus eruditus* is upon his fingers, so that the slightest abnormality is at once perceived by them, and simultaneously, uninterruptedly, he announces to his followers the precise condition of the organ in question. His class is only moderate in size, and mostly made up of foreigners. I heard Maisonneuve once say that Piorry could detect and describe a clot beneath the cranium.

Bouillaud is no doubt a little vain of his resemblance to the first Napoleon. For my part I could never see it; but one thing is pretty certain, that is, although a physician he has spilled more blood than any surgeon in Paris. What does Bouillaud do? Bouillaud bleeds.—*Corr. Am. Med. Times.*

Sore Nipples.—Prof. Barker, in the *Medical Times*, without delaying to comment on the great variety of remedies proposed by the standard authors, makes a concise statement of what his experience has led him to believe the best method of treatment in each case.

Erosion,—Or when it is more extensive it is called *excoriation* of the nipple, is a superficial wound of the skin, in which

the derm is laid bare by the removal of the epidermis by nursing. Sometimes it produces little vesicles, one or more, on the apex or sides of the nipple, which are broken by sucking, and the scales from which are again pulled off, and we have what the nurses call the *chapped* nipples. From this results entire destruction of the derm, and we then have *ulceration* of the nipple. The surface is then of a bright red color, granulated, and frequently swollen, and groved in fissures. When such a condition exists, you can readily understand that the act of nursing produces intolerable suffering, to such a degree that patients have often told me that the pains of labor could be more easily endured. I have sometimes seen half of the nipple bevelled off by this ulcerative process. But if you see the case sufficiently early, and treat it properly, and the nurse and patient scrupulously follow your directions, the ulcerative process may always be avoided. In the early stage of erosion and excoriation, direct that as soon as the child leaves the nipple it should be very carefully wiped dry, with a soft piece of linen, and then painted over by means of a camel hair brush, with the tinc. benzoin co. Brush it over three or four times, allowing an interval of a minute or two for each application to dry. This forms a kind of artificial cuticle, which should be renewed each time that the child nurses, and if it is possible to make the child nurse through it, direct that a nipple shield should always be used. Very good ones are now kept by our apothecaries generally, but in selecting one, be careful that its base is sufficiently large and elastic, so as not to strangulate the nipple. The first application of the benzoin produces a little smarting and burning pain for a moment or two, but its renewal is not usually painful. If the ulcerative process has commenced, stop nursing from the nipple. There is no other way, and the more promptly you decide to do this, the more speedily will the nipple be cured, and very frequently it is not necessary to suspend the nursing more than twenty-four or thirty-six hours. Empty the breasts by gentle rubbing only. This can only be done by tact and perseverance, although it sometimes requires ten minutes to get the first few drops. Then paint over the ulcerated surface, twice a day, with a solution of nitrate of silver, gr. x., ℥j. of distilled water, and keep the surface covered with carb. magnesia, or what I think is still better, calomel.

Tissue or Crack—At the base of the nipple occasions intense suffering, often I have thought quite as severe as the form of sore nipple that I have just described. It sometimes

is so small that it can only be seen in a good light by bending the nipple over to the oppsite side. To cure it pencil the bottom of the fissure with a very fine point of the solid stick of nitrate of silver, and then cover it with collodion, that is the solution of gun cotton in sulphuric ether. If the fissure is not associated with the form of sore nipple that I have before described, or with inflammation of the nipple, that I am about to speak of, it is by these means cured speedily.

Inflammation of the Nipple is sometimes a cause and in other cases a consequence of the preceding conditions, and the inflammation frequently extends to the areola. The nipple is conical, red, swollen, and excessively painful. Apply a soft bread and milk poultice for a few hours, and then keep it covered with one or two thicknesses of linen, wet in a weak solution of leod water, as for example:—℞. Liq. plumbi diacet. dil. ʒ j.; aq. rasæ ʒ iij.; M. ft. lotio. After the inflammation is so far subdued that nursing can be borne without much pain, you will do well to substitute for the lead water the following:—℞. Aq. rosæ, glycerin., aa, ʒ ij.; acidi tannic. ʒ ij.; M. ft. lotio. I have described each of the above forms of sore nipples as distinct affections, but you should not forget that they may be associated, either two forms or the three together, when the treatment must be modified or combined according to the special indications.

Eczema of the Nipple—Is, according to my experience, quite rarely met with, as I can only recollect six cases that I have seen. The first was at M. Velpeau's wards, at La Charite, in Paris. I have seen two cases in our lying-in wards, and three in consultation practice. Velpeau's prescription, which he said he had never known to fail, was the following ointment:—℞. Ung. aq. rosæ ʒ j.; mag. carb. ℈ ij.; hydrarg. chlor. nitr. ʒ j. M. You should direct the apothecary to rub it up very thoroughly, or it will be lumpy. This ointment cured in a few days the cases we had in this hospital, but I am not able to say how successful it was in other cases.

Hydrophobia.—Dr. M. C. Hazen, of Haddam, Ct., reports in the *Boston Med. Jour.* a case of hydrophobia referred to the bite of a dog *eleven years previous.* The dog lived two years after inflicting the wound, and then died from a fall, breaking his neck. The same writer refers to a case in an adjoining town, where a man with hydrophobia (terminating

fatally) bit two persons who were attending him, both of whom died of well-marked hydrophobia, the last fifteen years after.

Dr. Hazen's case had a remarkable inclination to snap and bite those around.

The treatment essentially consisted in moderately full doses of Morphiæ and Stramonium, a free mercurial purge the third day, a blister on the calf of the leg; the sixth day, small doses of Quina and Ar. Sulph. Acid. The patient recovered.

We are inclined to the opinion that the case was not one of hydrophobia. The details of convulsive action, inclination to bite, &c., so far as given, do not indicate more than the presence of some centric or excentric cause of irritation of the nervous system, which, unfortunately, was not discovered, because of the preconceived idea of hydrophobia, which had taken possession of the attendant's mind so thoroughly as to exclude search after the real lesion. The successful result of a case, or even appropriate treatment, does not by any means necessarily confirm a diagnosis. Particular groups of symptoms being, for convenience, adopted as designating particular diseases, it happens unluckily that sometimes diseases come to be looked upon as positive entities, as was evidently the fact in this case of so-called "hydrophobia."

Hydrophobia is a good deal like "worms" in popular pathology—it covers a great variety of affections. Real cases of hydrophobia are as rare as tetanus from any single cause; the pathological group of symptoms just about as common as tetanus from the variety of causes, idiopathic (undiscovered?) or traumatic, which may give rise to it.

Of course the "barking and snapping and biting" every modern pathologist understands the meaning of.

Uterine Hæmorrhage.—Dr. Conkling (Med. Times) speaks highly of the introduction into the *os* of Liq. Ferri Per Sulph. by means of sponge or a strip of muslin, or by direct injection. The vagina should then be plugged thoroughly in the usual manner.

Delirium Tremens.—Dr. Lewis A. Sayre, in the same paper, reports successful use of the iced bath in the treatment of delirium tremens. The suggestion was made to him by Dr. Bauer, of Brooklyn. The case was immediately under the care of Dr. Orsamus Smith, of Blackwell's Island Hospital. The powerful sedative influence of the cold was well illustrated.

Pirogoff's Operation.—B. Frank Palmer, the man who, *Punch* insisted, makes better artificial legs than Nature does by her previously supposed inimitable processes, objects to Pirogoff's operation, as leaving the extremity little fitted for serviceable use, and at the same time badly adapted for supplying artificial compensation. He suggests for the surgeons' consideration in amputating the *leg* and *thigh* the following places of election:

1st place of election. The *lower third or fourth of the leg.* Flap operation. Remove the malleoli fully *always.*

2d. The lowest point possible between the first place of election and the upper third at which a good *flap* can be made.

3d. Immediately below the tuberosity of the fibula, if not practicable to save four inches below the patella, *with full use of joint.*

4th. The lower third of the thigh—*ten inches from perineum.* Always fully remove the condyles of the femur. Flap operation.

5th. *The utmost length possible*, if necessary to amputate above the fourth place of election. Flap operation.

These points, he states, have the approbation of the most eminent surgeons in this country and Europe.

Quinine as a Prophylactic.—A very sensible correspondent of the *Reporter* sustains views which we have heretofore advanced on this point as follows:

It has been a question with me if this Commission has not done more hurt than good, especially in the recommendation of quinine as a prophylactic for intermittents. I must question the propriety of giving quinine in a perfect state of health for the purpose of preventing an ill effect from malaria. Those cases that have been reported as being benefitted by the supposed prophylactic power of quinine, if theory or reason is good for anything, no doubt in such cases there existed an incipient form of disease—at least, were under the influence of malarial poison.

It was my privilege to spend a few weeks in our army—in Virginia, on Arlington Heights—last autumn. A number of cases of the form of disease that prevailed at that time came under my observation. Almost every case assumed, at first, an intermittent type of fever, attended with a congestive form of diarrhœa. I observed in the treatment quinine and opium were given liberally in combination—in many of these cases the fever assumed a continued form, with increased enteric symptoms. In this state of the disease they were removed from the army hospital tents to one of the hospitals in Washington or Georgetown, where they were treated for typhoid fever, as I was informed. A few cases were attended by myself. In all these cases I prescribed opium with hydrarg. c. creta, sinapisms over the abdomen until the tenderness upon pressure was relieved, after which quinine was used with marked benefit. One of these patients had a relapse before I left; the symptoms were much severer than in the first attack, ten days or so previous. The surgeon of the regiment remarked, in examining, at the *time of the relapse*, that it was frequently the case that his patients had a relapse, and *that* this was one of the ordinary type, and that he would now have a course of typhoid fever, and there could be no escape. I prescribed for him, as at first, large doses of opium combined with mercurial chalk, aided with counter-irritants over the abdomen, until the congestive form of disease was subdued, after thirty-six to forty-eight hours' duration. Quinine was then administered with the happiest effects. How much this Sanitary Report, in favor of the prophylactic effects of quinine, has contributed to the *doubtful* practice, to say the least, is not known. One thing is certain, so far as I could learn: our troops never had quinine given them unless on the sick list. The Sanitary Report would seem to recommend it for the well and healthy. I am fully convinced that a mild form of disease was converted into an acute form by the too early administration of quinine, after which they were treated at one of the hospitals in Washington or Georgetown for *typhoid fever*—a *polite and learned prognosis*. A quinine treatment was followed up, and *some* did live through it. How much the report emenating from the Sanitary Committee led to the abuse of this remedy, of course, is mere presumption to say. The duty of this Sanitary Commission falls naturally, it seems to the writer, on the Brigade Surgeon and the Commissary; if so, why not abolish the whole system as worse than useless?

W. D. S.

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ORIGINAL COMMUNICATIONS.

NITRIC ACID IN HOOPING COUGH.

Read before the McLean County Medical Society, by S. W. NOBLE, M. D.

Mr. President—By permission I would submit a short paper to the consideration of this Society, the reading of which will fully explain its object, and the universal prevalence of Hooping Cough in our County at present is sufficient apology for reading it at this time.

A few days ago while examining the able report of the Chairman of the Committee on Practical Medicine to the Illinois State Medical Society, I was astonished to find that he had made no mention of Nitric Acid in the treatment of Hooping Cough. He said that during the year this disease had prevailed as an epidemic in his own county. Finding nothing on the subject I was prompted to give my experience to the profession. I will not attempt to write an essay on Hooping Cough, or to present a review of the treatment that has been from time to time adopted. My object is to offer a plain relation of facts which I hope and believe will be of advantage to every member of the Society. And as my investi-

gations all far from being thorough, and having but little authority for what I say on this matter, I would be generously indulged by the members present. Were it not the fact that you are all acquainted with me and know that I am one of the last men to be carried away with new cures, I would not make this report.

Dr. Goodbrake's description of the epidemic in De Witt County forcibly reminds me of one that visited our portion of McLean County in 1852 & '53. The epidemic raged for some time in a very malignant form. A large per centage of the cases terminating fatally. This state of affairs became alarming to parents and physicians. We tried all the known remedies and some of the "domestic," but to little effect. I well remember my anxiety and professional responsibility was increased from the circumstance that I was at the time boarding with an excellent family of people, who had a couple of favorite children sick of Hooping Cough—one a daughter aged six years—the other a son two years younger, both of delicate constitutions and the son predisposed to Asthma and Croup. When they had been sick about six weeks, and were almost worn out by repeated spasms of coughing, unable to retain food upon their stomachs, their faces swollen from engorgement of the vessels, until their eyes were almost closed, frequent attacks of epistaxis, and all remedies usually prescribed in such cases tried to no purpose, including the Nitrate of Silver topically applied as recommended by Dr. Watson, I chanced to meet my uncle Dr. H. Noble, a member of this Society to whom I related my sad experience in the prevailing epidemic. He informed me that he had seen Nitric Acid recommended in some of the Journals as a cure for Hooping Cough and urged me to try it. But I was unable to see how the remedy, could cure the disease in question, and paid but little attention to what he said. I searched my library for the article he referred to but did not find it, and to this day have never read anything in the Journals on the subject—(since reading this paper I have found the article referred to on page

125, vol. 1, new series of this Journal.) Two or three days after the interview, the mother becoming more and more solicitous to have something more done for her children I related to her the conversation I had had with my uncle and proposed, if she was willing, to give the Acid a trial. I told her that it was an excellent tonic and could do no harm, but insisted upon her not expecting too much for the medicine and again informed her that Hooping Cough was a self-limited disease and must run its course. She was anxious to try anything that promised relief, for she was nearly exhausted from protracted watching and anxiety. So I put 1 ʒ Nitric Acid in a tumbler of sweetened water, and directed the oldest child to drink freely of that during the afternoon. The drink was palatable, and the mother being desirous to test the powers of the remedy induced the child to drink it all in about five hours. I then prepared some more which was given freely until bedtime, when the child went to sleep and rested all night without waking—the first good sleep she had had for a month. She never hooped again.

On the day following the boy took the same prescription with like effect. These children were so reduced with the croup that they had been "watched with" for weeks and every time they coughed during the night, and that was every 15 or 20 minutes, they had to be raised up and supported in the bed to prevent suffocation. The improvement in these cases was so sudden and well marked that we could not satisfactorily account for it in any other way than to attribute it to the Nitric Acid. A coincidence would not explain the change.

As before said Hooping Cough was common at the time, and I prescribed the Acid in nearly every case thereafter, and in uncomplicated cases with almost uniform success—I could give you case after case in which I have prescribed it; and if necessary I could procure genuine certificates that would startle a patent nostrum vender. But I deem such things uncalled for, and if I have said enough to induce the members present to give the article a trial, I will have accomplished my object

in reading this paper, for if you once try it, I am certain that it will work as finely for you as it does for me. My formula for giving it is this: fill a glass-tumbler with sweetened water, and pour in nitric acid enough to make it as sour as good lemonade. This makes comparatively a pleasant drink, which I insist upon my patients *drinking freely*. I have no fears of his drinking too much, if it is sufficiently diluted. We have a delicacy in saying how much a patient may take. I have given 1 ʒ to a child six months old, within twenty-four hours. An adult male can take 1 ℥ per day, and plow right along.

The question will no doubt be asked, will it cut short the the disease? It will. How much?—This I will answer by asking, what is the usual course of the complaint? Of what number of days duration? Dr. Watson, who I believe is admitted on all hands to be good authority, says: "The ordinary duration of the disease is from six weeks to three months." He further says: "It will in all probability run a certain course, and our business is to conduct it evenly and safely to the end of this course."

According to my experience with the acid treatment, if it is commenced early and continued regularly, the disease will terminate in between one and three weeks and a-half, and the patients will never hoop. But the most striking examples of the curative properties of the acid, are where the patient has been coughing three or four weeks with no complications. Breathing and circulation natural between paroxysms of coughing. In such cases I have no hesitation in promising a cure in at least forty-eight hours. I prescribe no remedy with more confidence than I do this in the spasmodic stage of hooping cough. I have used it now for over nine years, and my experience has not been confined to any particular epidemic or locality. * * * * * *

CASES OF URÆMIA AS SEQUELA OF SCARLET FEVER.

By W. BROOKS, M.D., of Chicago.

Was called at 10 o'clock, A. M., May 10th, 1851, in consultation with the late Dr. — to H. S. of N—, aged two years. Found her skin pale, dry and harsh, general anasarca, pulse sixty small, does not swallow, comatose, pupil of eyes dilated to greatest extent, a slight convulsion occasionally, decided ammoniacal odor in her breath, has passed no urine for forty hours, evidently in articulo mortis; died ten minutes past eleven. The following are the details of the case as narrated by Dr. L.: About three weeks previously she was attacked very lightly with simple scarlatina, desquamation commenced on the sixth day of the eruption and progressed apparently favorable until eleven days after the first appearance of desquamation and the twenty-first from the attack; when the mother discovered a general fullness that was unnatural and her urine small in quantity, smoky and of a port wine color, the child sleepy and snored very loudly, could be roused, but at once relapsed. She was confident the child had taken cold the day previous. At this time, Dr. L. was called and prescribed as follows: ℞—Bitartrate Potassa i ʒ ; Aqua ss O. Solve to be drank in twenty hours. ℞—Buchu Fol. i ʒ ; Aqua Bullient, i ʒ . Infuse; give one dram every three hours. This treatment was continued, the urine diminishing until it was suspended about four o'clock A. M. the 9th, being about forty-one hours previous to decease, after which she was roused with great difficulty. Fifteen hours before death, convulsions supervened.

By request, sectio cadaver was had twenty-four hours after death. General appearance, sanguine, anasarcous; brain, the membranes paler than natural, slight effusion between the

arachnoid and dura mater, and in the ventricles. As the calvarium was being removed, a decided urinous odor was emitted. One dram of the fluid was preserved, which, being put in a flask and heat applied, gave a strong ammoniacal odor. The lungs were somewhat engorged with blood; there were two ounces of nearly transparent fluid in the chest. The same urinous odor was observed when we opened the cavity of the chest as when the calvarium was removed, and a similar ammoniacal one emitted on application of heat to the fluid. On opening the abdomen, the urinous odor was still more marked. Here we found about six ounces of a pale-straw colored fluid, to which heat being applied, the same result was obtained as from that of chest, etc. There was nothing remarkable about the heart. Stomach, intestines, liver and spleen not unnatural, except they were abnormally pale; bladder entirely empty, except two or three casts of tubuli uriniferi. Kidneys very much congested and filled with epithelium. In the pelvis of the left kidney were a few drops of urine, which, on analysis, gave the same results as one dram did which was passed forty-one hours previous to death (which was the last and all that was then passed, and had been carefully preserved by the mother). This proved albuminous by application of heat and nitric acid. Under the microscope could be seen good casts of the tubuli uriniferi, epithelial cells and blood corpuscles.

Case 2d.—Was sister of preceding, four years old. Was summoned to meet Dr. P. in consultation, at six o'clock A. M. the 13th. She had had a similar attack of scarlatina at the same time as her sister. Found her pale, anasarcous, comatose, breathing stertorous, pupils dilated and immobile, breath ammoniacal, pulse fifty-eight, feeble, skin dry and very harsh; has occasional spasms; has passed no urine since four o'clock P. M. the day previous, and then only two drams; can only be roused for a single instant. Introduced a catheter; found the bladder empty. She was evidently sinking, and died at eight o'clock the same morning. She was exposed to cold at the same time as her sister; but no symptoms that caused her

parents to send for their physician, Dr. P., until twelve o'clock M. of the 12th. He gave ℞—Calomel iii grs.; Jalap iii grs., which was to be repeated in six hours, unless it proved actively cathartic; also, ℞—Buchu Fol. i ℥; Aquæ Bullient i ℗; infuse, give two drams every three hours. The urine was suspended about four o'clock P. M. of the same day. Sectio cadaver twenty-six hours after death. The post-mortem appearances were nearly identical with the sister. The only difference we were able to detect was a little urine in the pelvis of both kidnies. There was the same urinous smell on opening the cavities, and the same ammoniacal odor evolved on subjecting the fluid of the cavities to the action of heat, and the microscope revealed a similar condition of urine.

Was called to Ida B——, at eight o'clock A. M., March 11, 1860, aged four and a half years, and to Jenny B——, her sister, at five o'clock P. M. of same day, aged three years and two months. It was the first day of the eruption of very mild cases of Scarlatina. The bowels being slow gave Ida, ℞—Calomel iii grs., Ipecac Pulv. 1 gr. In six hours, it not having moved the bowels, gave ℞—Fluid Ext Senna ss ℥; the throat symptoms were scarcely observable, a free use of diluent drink being all that that was required. To Jenny gave, ℞—Calom. ii grs., Pulvis Ipecac i gr. It acted freely as a cathartic in five hours. To her also gave freely of diluents. Desquamation commenced on the fifth day of the eruption and progressed slowly. It seemed more like a throwing off of branny scales, or more properly epithelial scales, rather than a cuticular desquamation. They each had a warm bath once per diem, with directions that they be kept in their room and well protected.

On the morning of March 21st, saw them and both were apparently doing well. A six o'clock P. M. was called hurriedly to them, and on arrival found that, contrary to positive directions, the day being very fine the nurse had taken both children into the door-yard for about two hours, and alternately drawn one in a hand carriage while the other stood on the

ground. Ida, the eldest, presented the following aspect: generally anasarcous; skin elastic, with bright red cheeks; comatose. Soon after my arrival, passed one ounce of urine, smoky in looks, of peculiar red color, which under the microscope exhibited blood corpuscles, casts of tubuli uriniferi and epithelial cells. On applying heat to it, it yielded Albumen; also the same on the addition of Nitric Acid. Bowels had moved naturally at 8 A. M., pulse sixty-four, pupils dilated, and would not contract by placing a lighted lamp near them; skin dry and harsh. ℞—Calomel x grs., Pulv. Ipecac iiss grs. M.—ft Chart No. V; one to be given every two hours. ℞—Citrate of Potassa (officinal solution) i ʒ, Aqua Pura ss O. M—Give one tablespoonful every two hours. A warm bath.

5 A. M. Bowels have not acted; has passed one dram of urine like that of yesterday on analysis except darker in color. Still comatose, pupils dilated to maximum, immobile, can be roused, but instantly relapses, thirsty, skin intensely hot and dry, pulse fifty-four, anasarca increasing, peculiar bright color of one cheek, an unusual ammoniacal odor in breath. Mustard semicupium sinapism over the kidneys, heated before applying; repeat Calomel and Ipecac; continue Citrate Potassa. ℞—Triticum Repens ss ʒ, Aquæ Bullient ss O.; infuse one hour; one ounce to be given every three hours.

6 P. M. Met Dr. L—— in consultation.

4th. Last hour has been restless, bowels have not been moved, no urine passed, skin very harsh, pupils still dilated and immobile; can be roused, but with difficulty; ammoniacal fœtor in breath increased. Continue treatment. Eleven P. M. At half-past ten bowels acted freely; sinapism had also acted; seemed to be fretted by it; pupils still dilated; can detect no urine in bladder. At half-past eleven, complained of something hurting her in the region of the kidneys. Three minutes later, of pain in or near the bladder, and very soon a desire to urinate, and soon passed two ounces of highly albuminous urine, charged largely with epithelial cells, casts of tubuli uriniferi and blood corpuscles. Bowels moved freely

twenty minutes of twelve. At twelve o'clock passed three ounces of urine, with less abnormal elements in it, and immediately a profuse perspiration broke forth, in truth she was literally bathed in it, which emitted the odor of warm urine. Suspend Calomel and Ipecac; continue Citrate Potassa and Triticum Repens. At one o'clock A. M. she passed three and half ounces of urine much lighter colored. At two A. M. passed yet more and waked up feebly. At this time the pupil contracted partially. Six o'clock A. M.—Has passed urine copiusly about once an hour near four ounces at a time on the average; perspiration abating; pupils contract quite freely; pulse eighty; is bright and lively; bowels have moved copiously; anasarca much abated. Twelve M—Urine very copious, light pink color, very little albumen; calls for food; give black tea and toast bread; continue Triticum Repens. Six P. M.—Evidently improving; pulse eighty-five; bowels moved freely at five P. M.

24th.—Ten A. M. Improving. Continue diet and treatment.

25th.—From this time for six days she continued to improve, when there was still some blood corpuscles in the urine. ℞—Tinct. Mur Ferri 1 ʒ ; M. Liquid Hydrochloric Acid xxx minims. Three gtts. in water every four hours. Of the infusion of Triticum Repens, one dram every three hours.

26th.—Ten A. M. Improving; continue treatment.

27th.—Ten A. M. Much improved. The Sesquichloride of Iron was continued three days longer, when neither albumen, casts of tubules or blood corpuscles were discernible; treatment was suspended; desquamation was soon completed, and now, April 5th, 1862, is in perfect health.

March 21st.—6 P. M. Found Jenny in convulsions, pupils dilated, immobile, skin dry and harsh, pulse sixty-one, heavy, laboring, breathing stertorous, insensible; has, to the best of nurse's belief, passed no urine since ten A. M.; repeated efforts at vomiting; odor of orange peel in her mouth; by irritating the fauces with a feather she vomited perhaps one

eighth part of the peel of a small orange, with some nearly colorless fluid. Convulsions soon abated, anasarcous, the flesh having a peculiar elastic feel. ℞—Calomel viii grs., Ipecac Pulv. ii grs. M. Chart, No. V. Give one every two hours. ℞—Citrate Patassa (of. sol.) iss ʒ, Aqua Pura ss O. M—Give one half ounce every two hours hot pediluvium with mustard; hot sinapism over the kidneys three by six inches.

22d, 5 A. M.—Bowels have acted moderately; no urine passed; can detect none in the bladder with catheter. No convulsions since 11 P. M. yesterday; comatose, pupils still dilated and immobile, can be roused but very little. Repeat calomel and ipecac; continue Citrate of Potassa. ℞—Triticum Repens, ss ʒ; Aquæ Bullient, ss ʒ. Infuse one hour; strain. Give one ounce every three hours. Apply blister three by six inches over the region of the kidneys.

At 6 P. M., met Dr. L. in consultation. Blister has acted well; when vesication took place, she aroused some, which was at 2 P. M.; at half-past two, she cried out as with pain, and applied both hands over the renal organs for a moment, and then transferred them to the hypogastrium, pressing and crying for a short time. At 3 P. M., she passed two ounces of urine of dark port wine color; analysis by heat and nitric acid showed albumen largely. The microscope, epithelial cells, casts of tubuli uriniferi and blood corpuscles. 7 P. M., is perspiring freely, with strong urinous odor. At half-past 7, passed five ounces of urine of much lighter color, which yielded some albumen, many casts of tubuli and some blood corpuscles; is bright and cheerful, disposed to be wakeful. Bowels have moved copiously four times during the last three hours. Desires a little food. Give some coffee made of unleavened bread roasted. Continue triticum repens.

23d, 10 A. M.—Greatly improved; urine has very little albumen, a few casts and blood corpuscles. 24th, urine appears well, except some blood corpuscles. On the 27th, some blood corpuscles remaining, ordered ℞—Tinct. Mur. Ferri, i ʒ; Liquid Hydrochloric Acid, v gtts. M.—Give three gtts. once in six hours.

29th.—All abnormal appearances had gone from urine; with a mild diet, she was soon convalescent, and is now, April 7th, 1862, in good health.

Feb. 28th, 1862, 8 o'clock P. M.—Was called to W. H—s, of Peoria, aet. seventeen years. He reports that a month ago he had a light attack of scarlet fever at Peoria; he came from thence to this place three days since. Very sleepy, rouses without much difficulty; the pupil of the eyes dilated to more than one half the extent of the cornea. The finger applied close to the eye will not cause the pupil to contract, and the same with a lamp. Pulse fifty, full, heavy, and labored. Skin hot, dry, harsh and sallow; general anasarca; flesh very elastic; breathing, when asleep, stertorous. Has passed about one dram of urine since morning, of a brownish red color, smoky appearance. Yields albumen, casts of tubuli uriniferi and blood corpuscles. Desquamation appears to be about one-half completed. ℞—Calomel, xx grs.; Ipecac Pulv. v grs. M. Chart No. IV—Give one every two hours. ℞—Citrate Potassa (Off. Sol.) i ℥ ; Aquæ Pura, i O. Give one and a-half ounces every two hours. Pediluvium of very hot mustard and water.

March 1st, 8 o'clock A. M.—Has slept and breathed very heavily all night; skin dry and harsh, pulse sixty-five; thirsty, tongue covered with a thick yellow coat, pupils still dilated immobile, bowels have not yet acted, urine two ounces since last evening, very much like that of yesterday. Repeat Calomel and Ipecac if it does not act briskly within two hours of taking last powder given. ℞ Fluid Ext. Senna ss. ℥ ; also, ℞ Bitartrate Potasse ss. ℥ ; Aquæ Bullient i O. Give as a drink ad libitum. Seven o'clock P. M. Bowels have acted copiously, urine increased to about ten ounces. Abnormal appearances much the same. Anasarca not changed. Sleeps most of the time and heavy pupils unchanged, Desquamation recommencing, continue Citrate and Bitartrate Potassa Diet gruel, repeat pediluvium.

March 2d. Eight o'clock A. M. Still sleepy, skin dry,

pupils contract some, dejections from bowels very copious, urine largely increased, remains of a dirty port wine color. Continue treatment. Eight P. M. Improved, less drowsy.

3d. Nine A. M. Urine very free, bowels have acted twice this morning freely. Anasarca disappearing, abnormal products of urine less. Eight and a half P. M. Very comfortable, more wakeful, pulse sixty-eight. Continue treatment, light diet.

4th. Appears to be improving, desquamation going on, continue treatment. Nine P. M. Sleeps too heavily, otherwise seems to be doing well, has been more wakeful during the day.

5th. 9 A. M. Much as yesterday, some unnatural dilation and immobility of pupil. Diet, stale toast bread and black tea. Continue treatment. 7 P. M. Sleeps too much.

6th. Anasarca much abated. Urine is yet albuminous. Some tube casts and some blood corpuscles, but is quite free. Skin is still dry. Sleeps less heavy, bowels have moved freely. Continue treatment. 9 P. M. Very bright.

7th. 8 A. M. At two o'clock this morning, he awoke with most intense head-ache, which lasted at least five hours and then gradually abated. Appears bright, pupils contract pretty well. Skin dry, pulse eighty-two; bowels moved freely at 7½ this morning. Urine free, has abnormal products in it to some extent. 9½ P. M. Is now asleep, breathes heavily, very heavily; his brother thinks not more so than is natural to him. Fifteen minutes of ten, is awake, says he has no headache, feels pretty well. Says no one can imagine the intensity of his suffering with his head for about two hours this morning. He soon fell asleep. The headache returned about twelve o'clock.

8th. 1½ A. M. Summoned to him in haste. Found him in a sitting posture in bed, rigid, with a generally convulsed condition. Eyes closed, no deglutition. Sinapism eight by twelve inches over the kidnies. Sinapisms to wrists and ancles. He gradually relaxed so far as to be placed in a recumbent posture.

2½ A. M.—Paralysis of left half of body. Sinapisms have not acted; has not swallowed. 3¼ o'clock. Some motion of left hand. 4 A. M. Right side paralyzed. Very little motion of left. Pulse for the last hour forty-two. 4½ o'clock. Sinapism acting smartly. Convulsions abating; he made a little groan for the first time. 5 o'clock. Emplastrum Cantharis five by twelve inches, applied on the place from whence the sinapism was removed. Some urine has just passed involuntarily.

7 A. M.—Convulsions have ceased; at six, manifested a desire to urinate, was assisted and passed about five ounces of smoky urine, much like that passed the 6th. Vesication is taking place. Can swallow without much difficulty. Paralysis of right side abating.

℞—Calomel xx grs. Ipecac pulv. v grs. M. f. t. Chart No. iv. One every two hours. ℞—Triticum Repens. i ℥ Aquæ Bullient, i O. Infuse one hour, give two ounces every three hours.

9 A. M.—Profuse perspiration with strong urinous odor and ammoniacal odor in breath. Vesication complete, blister to be dressed with leaves of cabbage dipped in hot water. Describes the approach of the convulsions as a drawing of the head from the pillow upward, as he was waking from sleep, till he came erect in bed when he lost consciousness, and it was in this state I found him.

6 P. M.—Bowels have not acted; sweats freely; urine free; pupil contract well; desquamation is proceeding rapidly. Repeat Calomel and Ipecac. Continue Triticum Repens. Very light diet.

10th.—Decidedly improving. Continue treatment.

11th.—9 A. M. Decidedly convalescing. The abnormal elements disappearing, blood corpuscles more in quantity. ℞—Mur Tinct. Ferri. i ℥; Liquid Hydrochloric Acid ss ʒ. M—Give ten g tts. once in six hours. Continue Triticum Repens. Under this treatment he continued to improve till the 22d, when he seemed convalescent. On the 25th he exposed

himself to fatigue, and on the the 26th there was some Hæmaturia. ℞—Triticum Repens. i ℥. Aquæ Bullient i O. Infuse one hour, take two ounces every three hours. Take of the preceding formula of Sesquichloride of Iron ten g tts. every six hours, and light farinaceous diet; this was pursued a few days and very slight hœmaturia remaining. ℞—Acidum Gallicum, xxi. grs. F. t. Chart No. 7. One every four hours. Under this all abnormal constituents disappeared from the urine. And now, April 14th, 1862, all diseased action seems to have passed away.

Elaborate microscopic detail, or elegantly wrought theories will hardly be anticipated of one engaged in the active duties of professional life. Believing the above related cases to be those of Uræmic intoxication or poison, as the result of exposure to cold during the period of desquamation in cases of simple scarlatina, we may venture the following deductions. We have two or three conditions present, which almost entirely lead to the train of symptoms observed in each case: First, the skin was dry and harsh, preventing such cutaneous elimination of the scarlatinal poison, as would have been the case if desquamation had been free and the skin had returned early to a normal state. Second, at the Sectio Cadaver the kidnies were in a very analogous condition to that of the skin. As there has been a desquamative state of the one, so there has been of the other. The kidney was filled with epithelium, the organ consequently enlarged, and in a state of hyperæmia as far as this filling with epithelium will permit. Thus, there is not only a large quantity of blood in the organ, but it is irregularly distributed and there is an undue quantity of epithelium in the tubuli uriniferi. This accumulation of epithelium over distends the tubes, thereby compressing the small vessels, which ramify upon the walls. Thus the blood is thrown back on the Malpighian bodies and the vascular system is irregularly supplied. When, hence, hæmaturia, with little or no secretion of urine, the blood being often exosmosed from the small vessels that are unduly filled. When conges-

tion of the Malpighian bodies exists to a great degree it leads to the rupture of the Malpighian vessels and the escape of all the constituents of the blood. Hence, we find in the urine albumen, blood corpuscles, casts of tubuli, etc., which give to the urine its peculiar color and smoky appearance. It will be observed that the cases had progressed well up to the given point, that they had been very light, or in other words there had been very little scarlatinal irritation of the skin and the desquamation imperfect, when on exposure to cold the cutaneous functions were suspended, causing an increased determination of blood to the already disordered kidnies. This disorder arising from imperfect desquamation and filling of the tubes with epithelium. The urine, therefore, is not secreted at all or very little, it remains consequently in the blood and uræmic intoxication is the result. Without proceeding in detail with an argument we will conclude by saying, that the character of the urine and its secretion, the state of the kidnies as observed, the condition of the pupil and the character of the coma make it patent to the writer that that they were each and all cases of uræmia, and of the grave sequlæ of scarlatina.

THE PERSULPHATE OF IRON

AS AN AGENT FOR THE DESTRUCTION OF POLYPUS OF THE EAR.

By E. L. HOLMES, M. D., of Chicago.

Any one who has had much experience in the treatment of Polypi in the external meatus of the ear, is aware that, while in some cases their entire removal is attended with comparatively little difficulty, in others, a radical cure is not easily effected.

Polypi can sometimes be eradicated by means of a loop of fine wire, passed round them near their attachment to the walls of the meatus. But it is often difficult to adjust the loop in such a manner as to secure the entire removal of the growth, especially where the pedicle is broad and where its exact situation cannot be ascertained.

Instead of the wire loop, we prefer, where instrumental interference is indicated, the use of the wood forceps or the ring forceps of Toynbee. In favorable cases either of these instruments can be passed a suitable distance into the meatus and the polypus seized and extracted. These tumors are liable, however, to return, unless the small portion, which generally remains adhering to the lining membrane of the meatus, is wholly destroyed by astringents or caustics.

Many attempts have been made to destroy polypi of the ear with caustic agents, and several authors report cases in which they have been successful in their use. Toynbee relates the history of several cases in which he removed the common "Rasberry Polypus" by the use of Potassa Cum Calce carefully applied to the exposed surface of the tumor, the process being repeated daily, till the whole structure was destroyed. The same author also states that the small red vascular polypi, which usually grow from the upper part of the meatus near the membrana tympani in young children, and which are rarely larger than a small pea, may be destroyed by milder astringents, such as Liquor Plumbi Subacetatis, Zinc. Sulph, and Tannic Acid. He believes, however, that the removal of the fibro-gelatinous polypi cannot be effected by means of caustics, since their structure is so firm as to resist the action of these applications.

After reading the report of one or two cases, in which nasal polypi had been destroyed by some of the salts of iron, I was induced, in two cases of polypi of the ear to try the effects of Persulphate of Iron, now so much used as a styptic.

The first case was that of a lady about thirty-two years of age. No satisfactory account of the origin of the polypus

could be obtained, for, although the patient had been for a long time troubled with dullness of hearing and a disagreeable discharge from the ear, the polypus had not been detected till some time after the appearance of these symptoms. An attempt had been made to remove the tumor, but it soon returned with symptoms much aggravated. Six months after the operation she came under my care much worn and debilitated by pain and loss of sleep. The swelling and tenderness below the ear were so great as to render all motion of the lower jaw impossible. The polypus almost entirely filled the external meatus, and presented the smooth glistening appearance of an ordinary tumor of the same species. There was so much nervous excitement, and the ear was so sensitive to the least touch that it was thought best to administer chloroform in order to make as thorough an examination as possible. On introducing a probe along the lower surface of the meatus, about half an inch, the bone was found denuded and roughened. I succeeded in passing a loop around the tumor and extracted a large portion of it, removing as much as possible of the remainder with a pair of forceps. On the next day the symptoms were the same, except that the pain was less. But at the end of a fortnight the tumor had returned to nearly half its former size. I had made use of of instruments in this case because I feared the Persulphate of Iron might destroy the tissues around the ulcerated portions of the meatus, and thus produce a larger necrosis. I therefore determined to use it in the following manner: I prepared small cylinders of the sault about a quarter of an inck in length and scarcely a line in diameter, from a thick paste of the iron and mucilage well rubbed together. Into a puncture, half an inch deep, which I made in the tumor with a narrow knife, I introduced one of these cylinders. On the next day the pain had not increased. On syringing the ear gently with warm water, and drying the passage with tufts of cotton, I found the meatus closed with a hard gray mass, which, on removal, proved to be a large portion of the polypus firmly coagulated. Another cylinder was

introduced in the same way the next day with the same result. Subsequently I merely applied small quantities of the salt to the polypus, keeping it in place with a bit of cotton pressed firmly against it. This was repeated daily, the quantity of iron being decreased as the deeper portion of the polypus was reached. This was soon completely destroyed, and in a week or ten days two small lamina of bone exfoliated, and the ulcerated surface of bone healed. At the present time, three months since, the termination of treatment, there has been no evidence of the return of the polypus; but the hearing is almost totally lost, and the jaw is still somewhat confined in its movements. The health of the patient, however, is completely restored.

The second case in wich I have used the Persulphate of Iron was that of a girl, thirteen years of age. The presence of the polypus had not been detected till a short period previous to visiting me for the first time. It was a glistening fibro-cellular growth, quite firm in consistence, extending nearly to the external opening of the meatus. Twenty-four hours after the introduction of a cylinder of the salt, as above described, I removed a large piece of the polypus, firmly coagulated. I afterwards applied the dry powder, daily, in small quantities, to the tumor for a week, at the end of which time, it was wholy destroyed. Quite a small red surface near the membrana tympani, on the posterior and lower wall of the meatus, probably the place of attachment of the growth, remained covered with granulations; but these disappeared in a few days under the influence of the iron. In neither of these cases did the salt produce much pain; except from one or two applications there was *no* pain caused by the treatment. After applying this salt several times to mucous membranes and to surfaces covered with the most delicate cuticle, I am disposed to believe that there is little danger of injury to the adjacent tissues, either in polypus of the ear, nose, or of the uterus, when applied with care.

A more extended experience will be necessary to establish the absolute value of this agent in the destruction of polypoid growths.

PITTSBURG LANDING.

Happily for us our experiences are the profits of life, which can be invested as other capital in improving ourselves or others.

Our Donelson experience gave ample opportunity for improvement in similar succeeding expeditions. Many unlooked for embarrassments owing to imperfect preparation were remedied, and our enterprise an entire success.

Our Sanitary Commission were telegraphed on Tuesday succeeding the battle for a supply of surgeons and nurses by Gen. Strong of Cairo. By 5 o'clock in the afternoon the following surgeons were on board the cars:

Drs. Ingals, Lynn, Isham, Ross, Amerman, Hamill, Davidson, Fisher, Bloodgood, Miller, Gillett, Allen, and myself.

Medical Students Mehler, Beasley, Zahn, Hollingsworth, and Annis.

Forty-eight nurses accompanied us, among others, Rev. Mr. Patton, Rev. Collyer, Messieurs Chadborn, Mason, Eddy, Judge Scates, etc.

We were sent in a special train, and made good time, nothing occurring to interfere with our progress or enjoyment of the trip. It was cheering as we left our cold and overflown prairie, to notice, as we progressed, the gradual change, marking our change of climate. The grass began to carpet the earth with its green tapestry, while the bursting beauty of the blossom covered peach tree, and the woods manting themselves in expanding foliage, were comforting changes to our northern eyes. While nothing did occur to interrupt our satisfaction, one of our surgeons came near being the subject of a hernial strangulation. He took off his truss upon retiring for the night, and inadvertently arose without reajusting it—and possessing a

repletion of abdominal viscera he was soon reminded of his remissness. His truss was one of an unusual pattern, and required so much explanation that he was well nigh exhausted, and if his flagging powers had not been well sustained we might have had surgery nearer than Pittsburg.

We had also a fine specimen of magic—one of the finest and most ingenious performances I have ever seen. A gentleman took a shawl, rolled up in the usual travelling style, cylindrical bundle, and placing one end of it to his mouth imitated drinking from a bottle, and so perfect was the trick (the reader will be interested in knowing that the peculiarity of the performance was in the operator's deceiving himself instead of his audience,) that he imagined he had drank, and from everything we could see he felt so. The effect, also, so far as we could judge, lasted about the time of three fingers. This was repeated at intervals for the amusement of our company, with unfailing relish.

We arrived in Cairo at 9 o'clock, a. m., on Wednesday, and found it one degree lower in my estimation—that of complete submergence. A few buildings along the levee are all the exceptions to be made. Venice with the exception of the Gondola. A child was drowned the next Monday while going to call its father to dinner.

We breakfasted by an arrangement of the Commission, and for a short time, owing to the conflicting and perhaps unauthorized rumors of departure, we seemed about to be garroted a while with red terror. But by the exertion of Mr. Pulta and Dr. Isham, we were transferred at once on board the Louisiana, a hospital boat just landed from St. Louis. This was a most fortunate arrangement for us, for on it we were fitted fitted out with comfortable berths and good food; all arranged and paid for by our Commision.

The "Louisiana" was an elegant boat for the purpose, admirably fitted up, corps of surgeons and nurses, apothecary with complete assortment of medicines, wooden bedsteads with straw beds or matrasses on them, all clean, comfortable, and in good order.

The boat surgeon was Dr. Wagner, a very quiet, civil gentleman, a West-Pointer, but, in my estimation, lacking the least bit of an article we sometimes call "snap" at others "gituip."

His assistant was as opposite as possible, all energy, vivacity, bright, exceedingly interesting, and very well suited to the other man's place.

We had also our indefatigable Dr. Douglas, who gives every indication of being a man for the place he fills. He is gentlemanly, attentive, accommodating and industrious, qualifications pleasant to those having intercourse with him and satisfactory to his employers. We had also Dr. Simmons, the medical director for Cairo. He is another regular army officer, and discovers his love for the color red—though very kind and think is disposed to do what is right, yet it is plainly hinted by those around him that subservience is no mean merit. I must not say much, however, as I may need his favor, and must not hazzard it by speaking too plainly. I was pleased with all I saw of him.

Our boat had a large, beautiful, yellow flag floating at the bow, the same used by all hospitals. Some fears were entertained of being fired into by guerilla marauders, but if there were any such near our flag, it protected it as it has done other boats since, while those not thus protected have been assaulted.

As we passed up the river, we began to notice the absence of enterprise—in bad buildings, no comfortable dwellings or convenient outhouses—and scarcely an orchard from the Ohio river to Pittsburg landing did we see.

About 10 o'clock, we met the "City of Memphis," the same I came down on on my former trip, loaded with wounded. She was the first boat down with wounded. We asked her how many she had on board, and received the fearful answer *nine hundred and eight.* It would have made my heart sick had I believed it, but it seemed so improbable that by common consent we conceded it to be a mistake of *five hundred.* But we ascertained at Mound City, on our return, that she

actually landed *seven hundred and twenty* in the Mound City Hospital. When others went home and were sent other places. We thought when we had two hundred and thirty that we were much crowded on the same boat—but multiply that by four, and when and how they lived is more than I can interpret. They had tents erected on the hurricane deck, tarpaulins spread on the sides, and every possible foot of room every where occupied.

This seeming barbarity was rendered more satisfactory when we recollect that on the battlefield there was absolutely no acmodation for many—and that while to suffer intolerable crowding together, it was only for twelve hours, and they would be placed in comfortable and beautiful accommodations.

We met two others during the night, but neither was so heavily loaded.

During our passage, the two members of the Sanitary Committee accompanying us, Mr. Ptton and Dr. Isham, allotted to each surgeon his quota of nurses, who are to accompany him and be subject to his direction. This very much facilitated all our movements, and enabled us to work systematically and efficiently, and see that the curiosity hunters were soon satisfied.

We landed at our destination, Pittsburg Landing, Friday, at 4 P. M., forty-seven hours after leaving Chicago. This was more than gratifying to us when we found the great need of our services. I spoke of the benefits of experience in the begining of this, and this impressed itself on me at Donelson—that whem temporary assistants are needed at all, they are needed *at once*, and our Sanitary Committee should have everything organized in advance for such occasions, especially their transportation, so that they may be on the ground when most needed, before others arrive, and while the injuries received need most attention.

Our delegation had the honor of being the first voluntary organization represented there—though seven hundred miles from it.

Upon arriving our Commission went on board the "Tigress," Gen. Grant's head quarters, to confer with the Medical Director, Dr. Murray, and after some consultation we were assigned to different places on boats, and some to labor on the field among the tent hospitals.

Drs. Lynn, Ingals, Millar, Gillet and myself, were asigned to the "Hiawatha," with medical students Beasley and Mehler.

It had been raining all morning and was then pouring down rapidly, and when we undertook to pass on shore from our boat to the "Hiawatha it seemed a realization of some of the hardships to which our poor soldiers are exposed—infinite mud.

The constant passing of wagons, horses, artillery and men, with the incessant rain makes travel almost impossible, and there were horsemen and footmen, and wagons loaded and unloaded picking their way through endless mud of untold depths. Some balky mules were giving variety by allowing their drivers a chance at their epithetical vocabulary. Some had run out and began at the beginning again, and the mules still looking at them.

Footpaths are made along the hill-side above the wagon track, and it was a touching sight to see there, rolled in their blankets, bodies of several soldiers who had died on the boats and been brought and laid there, with their open glazed eyes looking up towards heaven, from which torrents of descending rain saturated their blankets and filled their sunken sockets, each passer by stepping over them, no kind friend to protect or care for them, even the natural ties of friendship being shivered by the stern necessities of war.

We found the landing paved for the last few yards of our way with beautiful sacked corn, which was not being improved by its position.

Upon arriving at our boat, we found it occupied by about sixty officers, who had been wounded and brought on it from the field, converting it, without any calculation, from a transport into a hospital boat.

There were twenty-five privates. The boat was under charge of Dr. Roskiton, of Gen. McArthur's Division. He is a German, and it is with some reluctance that I express my surprise that such a man can obtain the position he occupies. It convinces me that favoritism forwards more than merit. So far as I could judge, and it was the universal opinion of my companions as well that he did not possess a single qualification for the place he filled. He was unable to get his outfit of stores, had the patients lying in utter confusion, and the only operation I saw him perform, was trying to squeeze pus from an edematous eyelid. When it was found by the medical director that he was incapable of taking care of himself even—he added insult to injury by sending a Dutch assistant surgeon to superivse him.

We received occasional accessions of wounded that night until we numbered about one hundred. After arranging our patients, and dressing their wounds, Mr. Collyer and myself went aboard the "Chancellor" lying along side of us. The scenes there could not be described, in their true character were all the adjectives in our language applied to them. Men with every conceivable injury, and suffering with both pain and hunger, with nurses worn out, no attending surgeon, the boat being a Commisary boat, converted, as was our own, by force of circumstances to surgical uses, a hospital steward doing for them the best he could—numbering over three hundred, laid in every possible, except comfortable, position, on boxes, barrels, staves, sacks, on the hard floors, with wounded, mangled limbs resting on the uneven surface of a row of barrels, some resting on the guards of the boat, with no tarpaulin to keep out the drifting and drenching rain; others on the lower deck, almost covered in mud, among the boilers, in the dark, no one to attend, with any certainty, to their wants or sooth their sufferings, very many in the most exquisite agony, resting on the hard floor, with nothing but a single blanket to shield their fevered and aching bodies, from the unfeeling boards. And yet, in the midst of all this, you seldom hear

them complain. A soldier must be very severely wounded to make any noise. In most cases a real cheerfulness is present. We took some wine and gave it to them, and labored for some time to get them as comfortable as possible.

The next day (Saturday), found us with our complement of wounded, near three hundred. We managed to get part of our army stores on board, and so far as any one of us could see, were ready to go. But it seemed almost impossible to to get away. I asked our boat surgeon what was keeping us, why not start Saturday night? He said the pilot did not want to start at night, and besides, *he had not enough wounded, if he started with so few, charges would be preferred against him.* At that time every available point was occupied, except on the hurricane and boiler decks.

In that condition we stayed from Saturday until Sunday noon, with our two Dutchmen spinning arounnd each other, as if practicing a new edition of the lancers, until Director Simmons came aboard, and I asked, what in humanity's name we were waiting for?—why these men, wounded and suffering might not as well be lying in the Hospital at Mound City as in that boat? He could give no answer for the delay, except the stupidity of our asinine Dutchmen. I wish I could letter their hats. I would substitute U. A. S. for the ones I saw them sporting. He gave me the order, I carried it to the captain, and we were off. On Sunday we had a very agreeable and important addition to our stores from the Cinic. Sanitary Committee's boat. Very many things we were absolutely and hopelessly destitute of were kindly supplied by them, and we will not soon forget the kind generosity of their purveyor, Mr. Griffin, I think his name was. I was intrusted with the surgical management of the boat, and divided it into wards, assigning each surgeon his place with his nurses.

In my last letter I felt in duty bound to express an opinion relative to female army nurses. I shall never change it, but the place then suggested as proper to be filled by females, had my typical idea of all that is true and noble to fill it for our

boat. I refer to Miss Safford, of Cairo. She embodies my idea of what a female should do and be, to accomplish her mission as an assistant to care for wounded men. She is active, kind, sympathizing, disinterested, prudent and indefatigable. She came aboard our boat, and we entrusted her with our cookery. It was a most trying place to come, where there was nothing, and organize and set in motion machinery that should supply the hungry wants of three hundred, and diversify it to suit the capricious appetites of sick men. So well did she succeed, that our men had the next meal after she came on board at meal time. And so from day to day, everything worked by her management smoothly and perfectly, and it seemed the crowning glory of our mission to see this difficult part of hospital service so admirably rendered. I regard her as the Florence Nightingale of this war.

The kind of food served out by the Commissory, is, of course, ill fitted for use of sick men, and the supplies of delicacies from our Sanitary Committee and Cinics came in most excellently. The hard bread is a very serious draw-back to good living, and many a jest goes off at the expense of the well named bread. It is said to have been in service as rooffing and pavement for six months without moistening through. One soldier of an antiquarian turn of mind, declared that one box marked B. C., meant *Before Christ.* Another converted it to a hitherto untried use. His leg was broken, and there being no splints, the surgeon found he had bandaged his up, using a *hard cracker as a splint!*

This last is really true, and a soldier witnessing the operation, cried out "Bully for the bread." We had an addition of three surgeons to our corps before leaving Drs. Roberts, Owen and Hamilton, all, I think, from Carbondale.

The class of cases we had on board were not so serious as those on my former trip. Our wounded were brought mostly from other boats, and the lighter cases were selected for moving, though many of them were severe enough. One young man was brought on in *articulo mortis*, and one Capt. Stevens,

of Dixon, died. His leg had been amputated, and I am sorry to say did not appear to have been performed according to the light that surgeons of this age should have before them. He was a noble fellow, was suffering at the time of the battle with dysentery, but would not stay behind, no doubt, the depressed state of his constitution helped to secure the final result. We had on our boat the gallant Col. Moore, of the 21st Mo., who had also lost his right leg. There was a slight tendency to secondary hæmorrage in his case, but it had amounted to nothing when we left him at Mound City.

The amputations showed a remarkable atonic tendency. None seemed to take on a vigorous healing character. One fine intellectual-looking German, with an amputated limb, was constantly delirious. There seemed no reason, so far as appearances went, why he should not get well, yet he went slowly down and was in *articulo mortis* when we left him. One case of a German interested me. He was shot under the lower extremity of the left scapula—and I took out the battered ball between the lower border of the larnyx and the right sterno mastoid muscle, directly in front of the vessels. He had spit blood at first and suffered pain, but now seemed to be doing well, eating every meal. When he was asked if ever he had seen fight before, he turned up his shirt, and his scarred body needed no confirmation.

We found many wounded in the lower extremities, some accounted for it by the repeated order of Gen. Beauregard "to fire low—never kill when they could cripple—that it required two well men to care for each wounded one, while dead men took care of themselves."

The battle of Pittsburg Landing was eminently disastrous. I could calculate from the number on various boats and in Savanah, nearly six thousand, and how many more are in tents and more slightly wounded I had no means of ascertaining. There were in Savannah, eight miles below, for the first few days after the fight, twenty-one hundred scattered in twenty different places; all the houses, churches or places

capable of holding them being occupied. These were supplied with seven surgeons. Imagine the services rendered to three hundred freshly wounded men by one worn out surgeon?

The surgeons on our boat worked nobly, and their labors accomplished every thing anticipated. Our medical students had a rich treat, and a surgical feast.

There was but one surgeon who failed in his trust, and he certainly deserved all the contempt he received. He constantly presented himself at the apothecary desiring stimulants for his patients, which they as regularly did not get. This continued until he was drunk, suspicion was aroused, he detected drinking it, admonished, and subsided. I have no desire to injure the feelings of this man or his friends, but would say that if he cannot control himself he had better not sell the birth-right of his manhood quite so cheap. I withhold his name, suffice it, he was *not* from Chicago.

The arrangements for the care of the wounded are perhaps as good as can be under the circumstances. The Medical Directors are all complained of, and it is interesting to notice what efforts they make to convince you how entirely the whole army is dependent on them. "Why," said one of them to me, "I cannot get anything to do with, why, sir, all I have is obtained at the point of my sword." They are the most persecuted and self-sacrificing men in all the world if they don't deceive themselves.

The system of temporary volunteer aid adopted by Sanitary Commissions and States, undoubtedly has its great merits, and it is difficult to see how it could be superceded. Almost anything good can be diverted to unprofitable ends. It has been very plainly insinuated that on such occasions, when surgeons are temporarily given the oportunity of using the knife, that the opportunity is seized and appropriated to their own instead of their patient's benefit. It would not do to go home without doing an operation, and conservative surgery is lost sight of.

There is, of course, an abundance of surgery to be performed, and where they are competent there is no reason why

volunteer surgeons should not relieve those who are worn out. On one boat the amount of surgery to be done was only limited by the endurance of the surgeons, and yet I am acquainted with and have every confidence in the gentlemen on board. Yet I have seen some very bad surgery done. There should be some competent man on every boat, and in every hospital, who should be held responsible to the Director for the conduct of his assistants. Many who go are reckless, and would rather have the credit of having amputated a leg than save the life of the best man in Christendom.

Our boat left Pittsburg Landing at noon on Sunday, and arrived at Mound City Hospital on Monday, at 2 o'clock, P.M. We had a few slight cases of Erysipelas on board, but none of any severity. The weather being mild, we kept our cabins ventilated, no odors accumulated, and we escaped. Our men were cheerful and grateful, and when we parted from them gave us pleasing evidence of their appreciation of our priceless labors.

Chicago, April 20th, '62. R**.

A CASE OF PUERPERAL CONVULSIONS

IN CHARGE OF DAVID DODGE, M. D., CHICAGO.

Mrs. H., aged about thirty, primapara, at about the seventh month of pregnancy, complained of restlessness and headache. It could not be ascertained that there had been previously during pregnancy, anything out of the usual course. Nine weeks previous had been awakened at night by a severe pain in the head, "as though something had struck her." She is of good figure, and evidently of strong constitution, having never been sick, and by no means of a nervous temperament.

Her husband being about to leave town for a few weeks, requested Dr. D. to call and prescribe for the difficulties above mentioned. Prescribed a mixture of rhubarb, magnesia and aromatic water, to relieve the constipation present. Little or none of it, however, was taken.

Wednesday, at 5 P. M., Jan. 14, the occupants of an adjoining room, heard a sudden fall in the patient's room—on entering, found her on the floor, insensible, and in strong general convulsions. Dr D. was immediately sent for, he arrived in about ten minutes from the access of the convulsions, at which time the convulsive action had ceased, but she remained in a state of insensibility.

Applied rubefacients to the extremities and exhibited an antispasmodic mixture composed of Lac Assafætida, Fl. Ext. Valeriana and Sulph. Ether. Convulsions returned violent in about fifteen minutes. After second convulsions, endeavored to exhibit a cathartic dose, ten grs. of calomel, with ipecac. Very little was swallowed. Convulsions continued recoming about once in fifteen minutes.

Dr. J. A. Allen came in consultation at about 8 o'clock. Exhibited fifteen grs. calomel, with two grs. of ipecac and half a grain of sulph. morphia, enemata of lac assafœtidæ, chloroform inhalations to moderate severity of convulsions.

The intervals of repose gradually lengthened, and the paroxysms became less severe, until between 3 and 4 o'clock A M., when they again became more and more frequent and violent, and on examination it was found that uterine contraction was commencing, the os uteri so patulous as readily to admit the finger. Convulsions continued with fearful severity, apparently very little controlled by the chloroform until about 7 o'clock, when a free evacuation of the bowels, showing powerful influence of the mercurial, took place accompanied with a free discharge of high colored urine, upon which the convulsions became much less frequent and powerful, postponing at one time nearly an hour and a-half.

Uterine contraction tolerably regular once in twenty or thirty minutes, but weak. *Os dilatable.* Ordered Secale Cornut., diffused in water, about ℈ij by enema. The pains became stronger, and the fœtus was expelled about 3 P. M., dead, but not decomposed. It may be remarked in passing, that for two months the movements of the fœtus had been remarkably

feeble, so much so as to alarm the mother, who having been a staunch Hydropathist, undertook to strengthen both herself and child by frequent cold baths, after which it appears there was little or no reaction.

At 5 o'clock, P. M., subsequent to delivery, she had another strong convulsion.

Exhibited ten grs. Calomel with a grain of Ipecac, and directed the attendant to stand by the bedside and on the first appearance of restlessness, such as had previsusly preceded a paroxysm, to cause the patient to inhale the Chloroform freely.

The Chloroform prevented the development of the convulsions perfectly, but the inclination continued until a little after midnight, when three full and free evacuations of the bowels taking place, the tendency passed away and she had no further difficulty beyond that ordinarily experienced after a severe labor.

The first time she spoke or showed signs of consciousness, was after the first evacuation of the bowels secured Wednesday morning—full consciousness began to be manifested after the large evacuations Thursday morning, a little after midnight.

She remained more or less disturbed in mind, and dull, for three or four days.

Among the incidental and troublesome symptoms, may be mentioned the immense accumulation of mucus in the throat during Tuesday night and Wednesday, requiring constant attention to prevent its producing mechanical suffocation.

The general plan of treatment adopted in the case, thus briefly sketched, was adopted on the general idea that morbific material was retained in the system, thus by its abnormal presence producing pain, then convulsive phenomena and then insensibility.

The indications were to control the disordered innervation giving rise to the inordinate muscular contraction ; and second, to eliminate the morbific material. Simple anti-spasmodics, then Morphia, and then Chloroform were employed to meet the first indication.

Calomel, believed to be the most potent of known eliminants, was employed to meet the second. Its more speedy general influence was to be favored by the adition of Ipecac.

The cause of Puerperal Convulsions may act primarily, either upon the central ganglia, or at the peripheral distribution. In the former case eliminants are indispensible—in the latter, large reliance may be had upon such agents as the Chloroform and Antispasmodics. Where the cause is clearly peripheral, (Ex-centric,) eliminats are of less importance. Where it is central in action, they are all-important. The sedative influence of blood-letting will occasionally be found useful in ex-centric cases—in centric cases it is clear, both "theoretically," and (fearfully so) practically, that *it is not a remedy* but something else.

When the cause of the disease operates so profoundly as to give rise to parturifacient contraction, unless anodynes and Chloroform fail to arrest the pains, it is better, when they are tardy, to centralize and intensify the uterine contraction by Secale or some similarly acting ecbolic. Indeed in many cases depending upon excentric causes, the convulsions will cease at once on the supervention of powerful uterine contractions, either spontaneously or by the effect of Ergot. On the other hand, we have seen cases which clearly evinced that Ergot may by irregular action, or when there is continuous mechanical obstruction, positively produce Eclampsia. This is no paradox to a physiologist with brains.

When time will admit, other eliminants may be employed, and especially dierutics, at the head of all which latter still stands the Acetate of Potash. In the present case owing to the great difficulty in swallowing but little could be used, and the main reliance was placed in *old* Calomel and *young* Chloroform.

SELECTED.

THE ACTION OF THE VOLUNTARY MUSCLES.

By LOUIS MACKALL, M. D.

[Extract from an unpublished work.]

69. The action of the Vountary muscles is regarded by the law of nature that we have already stated, (37.) By virtue of this law, the determination of the nerve-fluid* to a muscle is immediately followed by the active elongation of its fibres; the contraction of a muscle or of its fibres as immediately follows the withdrawal of the nerve fluid. In other words, the presence of the nerve-fluid, its cause of action, is, by virtue of this law, always attended by an active elongation of the fibres of a muscle; while the absence of a due portion of this fluid is as constantly attended by the contraction of its fibres.

By the aid of this law of nature, we have explained, I think, in a plain, intelligible, and rational manner, the phenomena presented in the action of the involuntary muscles, that are placed about the walls of the tubes or hollow organs; by the same aid, the phenomena presented in the action of the voluntary muscles may be as rationally and intelligibly explained.

70. The minds of Physiologists of the present day are so fully impressed with the erroneous belief, so long inculcated in the books, that the active state of a muscle is that of contraction, and the elongation of its fibres, (a state of which they possess a very imperfect and false notion,) which they are pleased to call relaxation, is a passive state, that the converse of this proposition, as presented above, will be at first regarded by them with prejudice and aversion. The true law of nature in relation to this subject, however, when its application is attended to, in the extensive application of it we propose to present, must in time be acknowledged; if truth, as is said, has a tendency to prevail over error in the human mind.

71. When we use the term muscle, it should be understood to embrace both the tendinous and fleshy portions of the organ; the same fibres, we conceive, extend through the whole, and are influenced by the cause of action, the nerve-fluid, as well in the tendon as in the fleshy part. The latter portion differs

* Why is this term still allowed to disfigure scientific medical writing?—Ed. Jr.

from the former probably only in the circumstance of being more largly supplied with nerves and blood-vessels, by means of which, when the muscle is in a state of action, the special circulation of the nerve fluid (43) is established.

72. For the better illustration of their action, it will be found convenient to seperate the voluntary muscles into the four following classes, viz: 1st. Such as are attached by one extremity only, having the rest of the muscle free to be extended or retracted at will; 2d. Such as are attached at both extremities, but are capable only of the same motion as the former class, that of direct extension of retraction; 3d. Such as are arranged circularly about the openings of the organs, and serve as sphincters; and 4th. Such as are attached to the bones at both extremities, and act by making use of the bones as levers.

THE ACTION OF THE FIRST CLASS OF VOLUNTARY MUSCLES,

That are attached by one extremity, and have the rest of the muscle free to be extended or extracted.

73. Of the action of this class we will advert to that of the muscles of the tentacles in the lower orders of animals; and among the higher orders, to that of the muscles of the tongue, of the ciliary processes, and of the male Organ of generation.

Perhaps there is no other instance in nature, in which is presented so fairly and clearly, the true condition of a muscle when in a state of action, as in that of the action of the muscles of the organ last mentioned. Physiologists, by a resort to Sophistry, of which we shall speak again, have ignored the action of these muscles, which is the same with that of all other muscles; for the state of erection produced by the action of these muscles is common to all the muscles of the living body when in action. Every muscle when in action is in a state of vital erection; which term should be understood to express simply the active elongation of the fibres, with a due supply of blood and of nerve-fluid to maintain this state. In the Human subject, the true character of the organ of which we are speaking is masked, as it were, by the great development of the blood-vessels and nerves with which it is supplied; but this is not the case in some other species of animals, as in the Horse, the Ox, the Hog, and the Sheep. In these the main body of the organ is composed of longitudinal muscular fibres that may be actively elongated to a length of from twelve to twenty inches. The view of muscular action heretofore presented may be repeated in connection with the instance before us.

74. The suggestive impressions, appointed to precede the active state of this organ, having been duly received, the anima determines the nerve-fluid, in an extra supply, to its fibres through the sensory and motory nerves of this organ. In consequence, the proper longitudinal and other fibres of the organ become actively elongated, together with the fibres about the walls of the vessels and sinuses, in which there is an increased flow and accumulation of blood. With this accumulation of blood there is established the special circulation of the nerve-fluid to this point; the supply of this fluid is thus further enlarged, and the action of all the fibres is exalted to its extreme limit. This latter state of the organ is expressed by the term "Venereal orgasm.'

75. In this representation of the action of muscles, there are three points to which we desire to direct attention: the first is, the propriety of regarding the organ in question as a muscle attached at one extremity by two heads to the ossa pubis and ischia; the second is, *the active elongation* of the proper fibres of this muscle; and the third is, the *stiffening or rigidity* of the same fibres when in action. The two latter points are particularly worthy of attention, as they occur in every instance of muscular action, and what is very strange, have been entirely overlooked by physiologists.

76. The Ciliary processes are the small muscles or bundles of muscular fibres that are attached by one extremity to the margin or verge of the opening into the eye, called the pupil; and are so arranged that by their extension the pupil is diminished or the opening narrowed, and by their retraction the pupil is enlarged or the opening widened. Light is appointed to be the appropriate suggestive impression to precede the action of these muscles. When the eye, in its normal condition in the living body, is withdrawn from the light, the mind, not having received this suggestive impression, does not call into action these muscles, and they are consequently retracted, and the pupil is enlarged; but when the eye is brought into the light and the impression is made, the mind determines the nerve-fluid to these muscles, and they become extended in proportion to the supply of this fluid; by their combined action the pupil is diminished or narrowed, so as to exclude such quantity of light as might be injurious to the optic nerve.

Here again we have a Vital erection, in the essential conditions—the active elongation, and apparently the stiffening of the fibres; and it is worthy of remark here, that in inflammation of these and the adjoining parts, as in iritis, there is estab-

lished the special circulation of the nerve-fluid to these fibres, and they become persistently elongated, and the pupil continues to be narrowed even when the eye is withdrawn from the light.

77. The longitudinal muscular fibres of the Tongue (with a view to the elucidation of the action of this organ) may all be regarded as one muscle, that is attached at one extremity, with the other parts free to be extended or retracted at will. The active elongation or extension of these fibres when innervated, or when in action is manifest in our own persons, if we confine our attention to the fibres in question; but this active elongation of the tongue in some of the lower orders of animals is very remarkable. Every one is familiar with the protrusion and elongation of the tongue of some of the domestic animals, as the Dog, the Cow, &c.

This action of the tongue of the Serpent is deserving of particular notice. When the animal is aroused or excited, it erects its head and trusts out of its mouth its forked tongue, to the extent of several inches. The suddenness and celerity of the motion of the organ forcibly reminds us of the appearance of a flash of lightning.

It is impossible, I believe, to suggest any rational explanation of this phenomenon, other than that of the innervation and consequent elongation of the fibres of the muscles that belong to this organ. The suddenness and celerity of the motion precludes all other agency but that of the nerve-fluid, passing along the nerves; which alone resembles in its motion that of the Electric fluid.

The action of the tongue of the Frog or toad, when it seizes its prey, is similar to that of the serpent.

78. A notable action of this kind is presented in that of the tongue of the Chameleon. To facilitate its description, this organ may be divided into four parts; first, the anterior bulbous portion, formed by the interweaving of cellular and muscular tissues—with the appearance of the end of the trunk of the elephant, it is furnished like this with a fleshy forceps at the extremity, with wich the animal seizes its prey; second, the middle or interior portion, *composed entirely of cellular tissue formed into a number of bands or hoops, having the intervals between them supplied with very loose and extensile meshes of this tissue;* third, the lingual bone, being a process from the centre of the os hyoides, arranged in the direction of the tongue, on which, when the tongue is retracted, the cellular bands and meshes of the second portion, and a part of

the bulbous portion, which is hollowed out for this purpose, are stretched or drawn, like the finger of a glove drawn over the finger; and forth, two well-developed muscles, having their fibres arranged longitudinally, and largely supplied with nerves and blood-vessels. These muscles arise from the cornua of the Os hyoides, one from each, and being arranged one on each side of the tongue, or of the central cellular portion, are inserted in the bulbous extremity.

When in a state of repose, or when retracted within the mouth, the organ is from an inch to an inch and a half long; but when about to seize its prey, commonly an insect, the chameleon creeps to within seven or eight inches of the object, and then fixing its body, and taking aim, as it were, suddenly, and with the celerity of lightning, thrusts forward its tongue, and seizes the insect with the fleshy forceps at its extremity. The food thus taken is then drawn into the mouth by the retraction of the organ.

79. If what we have suggested be admitted to be the true law of muscular action—if innervation, or the determination of the nerve-fluid to a muscle, is attended with the active elongation of its fibres, there is no difficulty whatever in comprehending or in offering a rational explanation of the phenomenon before us. The animal, it will be understood, determines its nerve-fluid to the lingual muscles, and the tongue is extended to the distance mentioned, simply by the active elongation of these muscles. The food is also drawn into the mouth by the retraction of the same muscles, caused by the withdrawal from them of this fluid.

But what explanation of this phenomenon can be given without the aid of this law? We give the only one we have met with worthy of any notice, that of Mr. John Hunter, in his own words, taken from the "Illustrated Catalogue of the Hunterian Museum."

"This length of tongue, its extension and contraction, are very singular, and if we well understood, very probably very curious.

"The cause and mode of the contraction of its length are not uncommon. The elongation of the tongue in this animal is perhaps like nothing that we are acquainted with in an animal body.

"The apparatus for this purpose is a small rounded body which passes from the apex of the os linguæ (glosso-hyal) to the bulbous part, and then through the centre of the bulb. The part between bone and bulb consists of two different sub-

stances, one a whitish substance, which is the firmest, and appears to be capable of keeping its form; the other is softer and more transparent. That part which passes through the bulb consists only of one substance, and appears to be a sheath for the reception of the os linguæ." The reader will please recollect that the apparatus, here described by Mr. Hunter, is nothing more than the bands and meshes of *cellular tissue* of which we have spoken above. But let him proceed:

"The first of these (*i. e.* the whitish, firmer substance) appears to be composed of rings or something similar placed obliquely in contrary directions, so as to appear to be two spirals crossing one another. Whether the other or softer substance" (the cellular meshes, L. M.) "has any direction of fibres I could not observe, but I suspect it is muscular. If I am right in my conjecture of this structure, and of its disposition, it will be no difficult thing to show how it may be elongated; for if these rings are placed transverse, they may be brought so near to one another as to shorten the whole very considerably; and if they allow of being placed almost longitudinally, they must of course lengthen it very considerably, and this position can easily be produced by muscles, which I take the pulpy substance to be.

"The contraction of the tongue is owing to a degree of elasticity; but this appears to be only in the cellular membrane, acting as an assistant to the muscular. The muscular contraction is owing to two muscles, one on each side of the tongue; each arises from the os hyoides on the inside of the os linguale, and passes along the side of the tongue to its bulbous part; but before it gets to the bulbous part it spreads itself all round.

"In the centre of each of these two muscles passes a considerable nerve to the bulbous part, and also two arteries. When the two muscles act, they draw the tongue back upon the os linguale, which, as it were, passes through the middle elongator, then through the centre of the bulb, till the whole tongue is retracted. Although the middle body is drawn upon the os linguæ, yet it does not appear to be a hollow like a pipe; it rather appears to be filled with a very ductile cellular membrane, as in every part of the elongating division of the tongue, in order to allow of the great difference in the situation of parts with respect to one another." (Hunterian manuscript.)

80. The Ant-eater (Myrmeco-phaga) furnishes a remarkable instance of the action of the muscles of this class. The tongue

of this animal is composed of two distinct muscles having different origins, and a different disposition of fibres. To simplify the subject, we may say one of these muscle arises from the sternum, and passing along through the muscles on the anterior surface of the neck, terminates at the tip of the tongue—its fibres being all arranged longitudinally; the other muscle arises from the os hyoides, passes around the former longitudinal muscle in close spirals, forming a sort of case or sheath for it, and terminates with it, at the end of the tongue.

When quiescent, or in a state of inaction, the tongue of the Ant-eater is probably about six or eight inches long; but when thrust into the ant-hills to secure its prey, Naturalists tell us, it is elongated or protruded to the extent of *seventeen* or *eighteen* inches.*

The object attained by this curious arrangement of the muscles, in accordance with our view of muscular action, is evidently, the free and unimpeded extension of the longitudinal muscle to its full capacity, by preserving it fibres, nerves, and blood-vessels from external pressure, while threading the narrow passages of the ant-hill through which it is forced. This object is fully accomplished by the action of the spiral muscle, which tends to dilate these passages, or at least, to enlarge and keep open the space enclosed by it, in which the longitudinal muscle acts.

In the absence of this view, Physiologists have been forced to adopt the very absurd supposition, that the tongue of the Ant-eater is protrude by the *contraction* of its *spiral muscle!*

81. The Woodpecker, as is well known, feeds on the grubs that burrow into the limbs and bodies of trees. The burrows are first exposed by pecking through the bark with its strong, sharp bill, and then the long tongue, like a flexible probe, is thrust in, as the Ant-eater's into the ant-hill, and the grub being harpooned, as it were, is dragged forth.

To adapt the organ to the purposes mentioned, the anterior portion of the tongue—I refer more particularly to that of the species called the Flicker, (Picus aureatus)—is composed of a horney, spear-shaped, barbed point; from this point there arise two muscles, tendinous at each extremity, but with fleshy bellies or middles—their fibres longdituinal; these muscles pass around the base of the cranium, one on each side, and then rest with free extremities in a groove or closed passage formed between the skin and cranium, and extending over the

* Curvier's Animal Kingdom, edited by Griffith, vol. iii, p. 300.

middle of the head from behind forward until it reaches the base of the upper Mandible. Besides these, two other muscles arise, one from the ramus of the lower mandible on each side, and pass around the longitudinal muscles, forming a sheath for them through their whole length. The arrangement of these muscles are strikingly similar to that of the muscles of the tongue of the ant-eater, and doubtless their functions are the same. When the longitudinal muscles are innervated and elongated, the upper bill, which is then applied to the tree, becomes the basis or part of resistance, from which the tongue is protruded into the burrows; the other or spiral muscles acting, as suggested, when speaking of that of the ant-eater, to preserve the fredom of the motion of the former, by protecting from external pressure the blood-vessels and nerves with which they are largely supplied.

The notion suggested by some, that the tongue is jerked forward by the contraction of the last-mentioned muscles, is absurd; as the means suggested are clearly inadequate to the end proposed. The contraction of any portion of these muscles could not effect a motion of the tongue to the extent of one inch, but, if contracted, the portions anterior to their origins would draw the tongue back, and counteract the effect of the contraction of the portions of these muscles that are posterior to their origins, so that no effect of the kind suggested, could result from the contraction of these muscles. The tongue is thrust into the burrows, probably to a distance of from five to eight inches, judging from the extensibility of the organ in the living or recently killed bird.

The longitudinal muscles of the tongue are commonly regarded as the cornua of the os hyoides, but I think it more rational to regard them as muscles (as their appearance clearly indicates) belong to this class, attached at one extremity with the rest of the organ free, to be extended or retracted at will.

82. The "Aij-Aij" is an animal whose habitat is confined to Madagascar. It presents several points in its natural history closely resembling those of the woodpecker. Like this, it feeds on a grub that burrows in the bodies of trees in that island; and it exposes these burrows by tearing off the bark with its teeth. The animal then introduces a long flexible probe, and pulls out the grub. This probe, however, is not the tongue; but one of the fingers of one of the fore-paws, which is curiously adapted in its structure to this purpose. The anatomy of this organ is not generally known, but I presume, from the office it is said to perform, that it is similar to that of

the tongues of the Ant-eater and of the Woodpecker that we have just described. In its retracted state it may present the appearance of a "shrunken" or "atrophied" member, as is represented; but its muscles are, I doubt not, well developed, with large blood-vessels and nerves, and capable of an extensive action of elongation.

83. The Tentacles of some of the lower orders of animals are so similar in structure, in their action, and in the purposes they subserve, to the tongues of the higher orders, that we are induced to regard them as their analogues. These organs are composed of muscles with longitudinal fibres, that are attached by one extremity around the outer margin of the mouth, and are extended or actively elongated for the purpose of collecting and of bringing into the mouth, the food or prey that may be floating in the element these animals inhabit. When the animals are reposing, or not feeding, these organs are retracted; but when engaged in taking their food, the tentacles are innervated, and actively elongated or extended. In some instances, as in the Physalus, the Enychoteuthis, &c., this extension is carried to a distance of six feet or more.* For a more minute account of the structure and office of these organs, I refer to the works on comparative Anatomy and Physiology. Our theory of muscular action offers to the intelligent student a number of suggestions that will be found of great use to him in his efforts to understand the more complicated structure and action of some of these organs.

[The remainder of this valuable extract, kindly submitted for our disposal by the Author, will be published in the next number of this journal.—Ed.

PROSECUTION FOR INFANTICIDE.

Dr. H. Culbertson, of Zanesville, Ohio, in the "*Lancer & Observer*," after giving a condensed statement of the evidence in a recent trial for infanticide, offers the following valuable remarks.

We regret that our limits will not permit the full details of the case, with Dr. C.'s opinion, and its reasons, on the sanity of the respondent. The prisoner having been acquitted under

* General Structure of the Animal Kingdom, by T. Rymer Jones.

cover of *insanity*—which from the report seems altogether gratuitous nonsense.

I. What is the true value of the hydrostatic test as a proof of breathing?

The principal objections to this test are: (*a*) That lungs may be artificially inflated; (*b*) that they may be inflated by the gas of decomposition; (*c*) that children may live for a time after birth without the intervention of apparent respiration; (*d*) that emphysema may cause lungs to float; (*e*) that hepatization and tuberculation of lungs are objections; (*f*) that pneumonia is an objection; (*g*) that atelectasis is an objection.

We will briefly consider these points:

(*a*) It is now established beyond a doubt that lungs may be partially inflated while *in situ*, and float on water on removal from the body. That lungs may be partially inflated when removed from the body, is too well known to need mentioning; but that they may be fully expanded artificially when *in situ*, is disproved by the researches of the most modern and reliable writers. It is even, as is well known by nine physicians out of every ten, extremely difficult to restore a still-born child artificially, with all the skill that the practitioner may exercise, and the no inconsiderable vitality of the recently born child. It seems, too, that artificial inflation may be confounded with partial natural respiration; and here lies one of the greatest objections to the hydrostatic test. Imperfect respiration may be mistaken for artificial inflation, because by the latter the lungs are never fully expanded. But this source of error is fortunately removed by remembering the fact that even the partial inflation of lungs *in situ* requires great skill in its accomplishment; and, furthermore, it is the height of improbability that in cases of infanticide restoration will be attempted, much less completed, by the suffering mother. On this point Taylor justly remarks: "One might be led to suppose that every woman tried for child-murder had made the praiseworthy attempt to restore a still-born child, although circumstances may show that she cut its throat, severed its head, or strangled it while the circulation was going on."

From these considerations we may then conclude that, if lungs are *fully expanded*, they are inflated from natural respiration, and have no fears of the objection of artificial inflation. But if lungs are partially inflated, we must look well to the condition of the child for other proof of live birth; and if there are no marks of violence, and no suspicious important circumstances attending the case, we may with the assistance

of the other lights of the case—as the color and marbled state of the lungs, the development of the child and amplitude of the mother, the place in which the birth occurred, the consideration of the social relation of the mother after child shall have been born, and the absence of any congenital defect in the child—these will aid us in determining that artificial respiration was not performed, and the cause of the inflation. It, too, is improbable that any mother, good or bad, would think of restoring her child by artificial inflation, in her ignorance of such process, even if she desired most earnestly to preserve the life of the infant.

The next objection is—(*b*) That decomposition of lung-structure which, producing a gas, may cause these organs to float on water, is a well known fact, and it is equally true that this is an objection to the hydrostatic test. As a natural consequence, when putrefaction is advanced in the lungs we cannot depend upon this test. But if decay is merely upon the surface of the lung, especially if it is limited to a few points upon the superfices, and does not extend to the substance of these organs, and if, added to this, the substance of the lung is yet of natural consistence, not softened, we may safely conclude that putrefaction will not interfere with the value of the hydrostatic test in the case. We may still further be assured this view is correct, if, on firm pressure between cloths and thin boards, or between the fingers and cloths, the gas can be so far removed, without destroying the substance of the lung, as to cause the portion to sink in water. For it has been found, by actual experiment, that the gas of putrefaction can be so far removed from the lung by compression as to cause it to sink in water, while the air of respiration can not be forced from the lung so as to make it sink by any pressure short of that which would completly break down its structure, and often not then. The reason for this is obvious. The gas of decomposition is outside of the air-cells, in the cellular structure of the lung, while the air of respiration is within the air-vesicles, and can not be forced out except through the bronchioli, which result is not probable, as the latter, too, are compressed in the experiment; or by rupture of the air-cells, which must be a rare result in an undecomposed lung. While the gas of decomposition being carried around, the air-cells can be readily compressed out, as the cells of the cellular tissue more or less communicate with each other, and these with the external air.

Again, the objection of decomposition is considerably removed by the fact that decay takes place with great tardiness

in the lungs—later than in any other organ, excepting the heart, uterus and bones. To illustrate this, I may cite one of my own experiments:

Nov. 12, 1861.—A small pig was placed in a manure pile, that decay might proceed as rapidly as possible. On the 15th, three days, it was half rotten. The lungs were not softened; the heart on surface showed some putrescent vessels. The lungs and heart together floated; on separating them, lungs sank (the animal never had breathed) and heart floated. On compressing the heart, it too sank.

This case not only illustrates how slowly decay progresses, but affords proof of the value of the hydrostatic test.

With these limitations and facts in view, we may consider the hydrostatic test safe, so far as limited decomposition is concerned; if decay be general through the lungs, the test is useless.

The next objection urged is—(*c.*) That life can long exist without respiration may well be doubted; that the new-born infant's heart may pulsate for a few moments, and there be no apparent respiration, is admitted as true. But what, we ask, have such cases to do with the true value of the hydrostatic test, since the pulsation of the heart must be shown by the mother or by another to have taken place? It follows, therefore, that if some party does not prove it, the evidence of life can not be shown in the case, and, consequently, life *being proven*, the hydrostatic test is not needed in such a case. The question then turns, not on the point, *Did* the child *breathe!* but, *Why did it not breathe!* To determine this, the state of the lungs and other organs are generally competent. This head will be again considered under ataletasis.

The next point is—(*d.*) It is asserted by certain writers that emphysema of lungs may be an objection to this test, but more modern authority believe that it can be, since those who consider it a source of error probably mistake the gas of putrefaction for the air of emphysema; and moreover it is difficult to imagine how we can have established the pathological condition of emphysema, without the lungs having been previously inflated with air. We may, then, with others, safely dismiss this objection.

Our next point is—(*e.*) That hepatization or tuberculation of lung is a well continued negative objection to this test may be doubted, because either of these conditions can be detected and distinguished from those evidences denoting breathing. Hepatization is rarely general; and if partial, some portion of

the lung will float if breathing has been performed. If it is general, the child could not have breathed and the *hydrostatic test is relieved*, as the child could live but for a moment with such lungs. Tuberculation of lung is a structural disease that in its very nature will prevent the new-born infant living but for a few moments, and may be easily distinguished after death on examination. And if it be not in proof, no man in his right mind would presume such child could have supported independent life. We may narrate a case in point: We were recently called to a case of miscarriage at the seventh month, a natural labor. The surface of the child's feet and hands were discolored, and the cuticle upon the sides of its feet and on the back of several of its fingers separted on being handled. The abdomen was tumid and the scrotum distended with gas. The face and surface generally were dusky in color; but further than this we observed no marks of putrefaction. Notwithstanding these evidences of decay, this child was seen to breathe, but was not heard to cry. It breathed several times (jerking respirations) without aid, and eight or nine times by blowing in its face. When the cord ceased to pulsate it was tied and divided, and the child enveloded in cotton, excepting its face, after which it breathed several times by blowing in its face, when death took place.

Post-Mortem.—Twelve hours after death. Lungs unexpanded, of a dark liver color, containing points of hard white tissue. On placing heart and lungs on water together, and separate, and also a number of small portions, all sank.

Microscopic examination of these hardened points showed oil globules, colestrine, granuels, epithelial cells, the surface of which were granulated, and tubercle corouscles, which showed round nuclei with and without the aid of acetic acid.

Here then is a case in which a child was born and respiratory acts were observed, and yet the lungs showed no evidence of respiration, for the simple reason that they were so diseased as to obstruct the entrance of air into the air cells. It follows, therefore, that in strictness there was no respiration, and consequently the hydrostatic test can not settle the question of life. It is clear, too, that this infant had only negative, dependent life, and under the law would be ruled out as a case beyond its province. This subject will be indirectly referred to again under the head of atelectasis.

The next objection is—(*f.*) Pneumonia has also been urged as a negative objection to this test. It is well known, however, that this disease is extremely rare in new-born infants,

and that when present in the very few exceptional cases, it can plainly be detected by its limitation and by the fact that portions of the lung are inflated. For my own part I have always believed that the use of an organ, as well as its disuse, may lead to corresponding diseases, and hence feel that the introduction of air into the lungs of the new-born infant may be a cause of disease, and consequently that the comparative state of rest of the intra-uterine lung is highly unfavorable to inflammatory disease of this structure before birth. We feel, therefore, that pneumonia is intimately associated with the presence of external air, and consequently doubt the accession of this disease without respiration having been established. We may, too, doubt its instantaneous production after birth, so speedily as be a source to of error in investigating cases of infanticide.

The next objection is—(*g.*) Atelectasis being simply a state of unexpanded lung, with no positive lung disease, we naturally conclude that the general system or some other organ of the infant must be at fault. It may be that the general powers of the infant's system are so weakened that the nervous influence is not sent down from the nervous centres with sufficient force to expand the chest, and therefore the lungs are not inflated; or it may result from a partial obstruction in the air passages. If this state result from partial obstruction, it may possibly be removed by the acts of inspiration and expiration, but if it be from lack of nervous power, or other than lung organic vital defect, the difficulty cannot be removed, and soon, a few hours at most, the child must die. It would seem, then, in these cases, that if on examining the air passages we find no obstructions, the possibility of such children assuming an independent state of existence is improbable. And if such can not assume independent life, we can not perceive how infanticide can be committed upon such infants, they being inevitably destined to perish for lack of respiration. It would be a misdemeanor to take the life of such cases, but not murder. But if the obstruction (as mucus) in the air passages were of such nature as to be removed by the effort of respiration, then infanticide could be inflicted on such infants, and it would be seen that the criminal, if guilty, should be held strictly accountable in such cases for the death of the particular child.

It is a fact, I believe, that children with atelectasis never recover, and can it be that our law will condemn the culprit for the murder of that which has no independent existence,

and is destined never to possess such independence? But we do not know that a child laboring under this disease ever recovered, and until we can prove that they may recover, we feel that when the presence of this disease is shown we are bound to conclude the child could not have lived.

What are the obstructive causes which may prevent the expansion of the lungs and simulate atelectasis? 1st, strangulation by various means; 2d, hanging; 3d, suffocation; 4th, drowning.

It must be determined whether these (except hanging) are accidental or homicidal, by a careful examination of each and the attendant circumstances. Strangulation offers the greatest prospect of success, and suffocation next, for obvious reasons. The other means may be the homicidal measure.

The subject of atelectasis has lately been incidentally developed in the trial of Brock *vs.* Kellock, before Vice Chancellor Stewart (see January number of *London Lancet*, 1862), in the course of which trial Drs. Lee and Ramsbotham gave it as their opinion, that proof of respiration was, and Drs. Taylor and Tyler Smith that it was *not*, necessary to establish live birth; the last two gentlemen believing that circulation can, for a short time, proceed without respiration. Dr. Anstie, in commenting upon these opinions before one of the London medical societies, takes the still higher ground that *consciousness* in the infant commences with the process of respiration, and that until the infant has become *conscious* it can not be deemed to possess an independent existence; and that therefore consciousnes should be one of the great evidences of independent life in the new-born child. That consciousness follows respiratian is a fact which most physician's have observed. The child must breathe, then we hear the cry.

This doctrine we must believe is correct, but we doubt its practical application in these cases; for who, but the mother, in many such cases could say whether or not the child had cried? Yet if it be kept in view as a leading principle, it will certainly, so far as we can perceive, lead to truth.

The presence or absence of consciousness should be one of the tests in these cases, and the fact should be discovered if the *unconsciousness* could have been produced from other than lung disease, which may enable the enquirer to determine the probable viability of the child irrelative to respiration.

The doctrine of proof of respiration being required to substantiate live birth is, it seems to us, far more safe in law than the ordinary doctrine of live birth, and it merits the closest

scrutiny of the medico-legal professions. The question must be closely considered in all its bearings. A large class of cases must prove beyond a reasonable doubt that so soon as respiration has been established, consciousness is a necessary sequence, before this doctrine can be adopted with safety. It, however, will not be correct to maintain because a new-born child is unconscious that it did not breathe, for other causes may render it unconscious. If such are not detectable on inspection, and if no proof can be afforded of respiration in the case, we are left without data, and should give the culprit the benefit of the uncertainty.

The condition of atelectasis may be readily detected on inspection, by the dark color and uninflamed state of the lungs, by their sinking in water, and by being readily inflated after removal from the chest, when they will readily float on water, thereby showing no organic changes in the lung structure

Under this head of our subject we conclude.

1st. If during the performance of the hydrostatic test the lungs float high, especially if they are large, marbled and of a bright pink color, and if decomposition is not, or but to a limited extent is, present on the surface of the lung, we may consider this test reliable of breathing; and if of breathing, it is one thousand chances to one in favor of live berth.

2d. If decomposition is present in the substance of the lung, or over the entire surface, the hydrostetatic test is useless.

3d. If the lungs are partially inflated and there is no lung decay, the hydrostatic test may become useful in connection with the other phenomena of the case.

4th. That emphysema, pneumonia and lung tuberculosis cannot be serious objections to the validity of *this test.*

It seems, then, that the hydrostatic test stands at the head of all of our means for detecting breathing in the new-born child; and that it had not lost its ancient value, but has rather increased in importance, by the efforts of able persons, whose object has been to qualify and show the true value of the objections to the test. I need hardly say that we cannot generally depend on this test alone; but there are cases so palpable from this test alone, as to force the conviction of breathing. However, it is our duty as physicians to avail ourselves of every phenomenon in the case, considering this test as the most important, but remembering not to neglect any of the evidences.

It will be noticed that no use was made of the *static tests* in this case. This apparent neglect was not an oversight, but

was omitted because we think but little dependence can be placed on either the positive or relative test. 1st. Because the weight of lungs before and after breathing differ largely in new-born infants; and 2d. Because the weight of the lungs to the body, before and after respiration is established, vary so intimately as to dictate the non-prediction of any facts from this source.

By reference to the testimony in this case, it will be seen that the physicians differed as to the value of the hydrostatic test. This may have been caused by some of these gentlemen understanding this test as simply referring to the fact of the lung floating on water; when in reality the test includes all those changes which are produced in the chest and lungs by respiration; as the enlargement of the chest, in depth and latterly, and of the lungs; the change in color and consistency of the latter, and the exudation of frothy mucus tinged with blood from incision of lung structure. The changes effected in the heart by respiration partially belong to this test; but the *static tests*, as they essentially differ in their nature from the *hydrostatic tests*, do not.

We now ask attention to the next division:

II. What is the proper duty of the physician in investigating these or other medico-legal cases? How far should he exert himself to obtain the truth relating to a particular case?

It must be evident that every sane man is interested in the maintenance of the public welfare, and therefore in furthering the ends of the law. No man can tell when he may need the protection of the law; when he least expects it he may be obliged to call for its magisterial aid. Society is but a unity for the development of good and happiness, and in order that it shall progress in the true sense of the term, each member must aid in the establishment of truth. The physician as a member of society has special duties to perform, as well as those of the citizen, and under no circumstances should he avoid these, provided the act will not conflict with his duties elsewhere, and he is competent, and he believes it will confer a benefit upon the community of which he is a member. No one will deny that, for a time, the physician may lay off his professional robes to act as the citizen, and again resume them; and I do not think any candid man will deny that a physician making a post-mortem examination, for and in behalf of the State, may for a time leave his profession, to inquire into extra-medical matter pertaining to a case. Why? Because he is both citizen and physician. Community expect of him,

as his profession has given him additional mental power and scope, that he will use the same for their protection against social evils. And is it possible that we have among us a single physician who would not ferret out crime in any of its hydra forms, with all the ability he may possess? Is there one of us, feeling our true position and our duty to act, that would shrink from aiding the law, from a fear that his motives might be questioned? Where, if not from the observing physician, would many legal cases derive their support in open court? The physician may be cognizant of *extra*-professional facts as well as professional, and shall he not observe and report such? And if he may observe such facts without the pale of his calling, is it not his duty also to follow up the case and make suspicions reality, if they are "worthy the name of reality?" Nay, more, is there a physician, seeing suspicious circumstances in connection with a case, that would *dare* to make no effort to discover if they were not reality? How could such a man balance his account with society, if, turning on his heel, he left such a case to be developed as it might be? There is no half-way: the physician either owes a full duty to society, to eradicate crime to the utmost of his ability, or he owes no duty at all. He is either a member of the social sphere, or he is not.

In the performance of these duties, if he should be obliged to resort to cunning means to obtain his information, is he not the better qualified for his duty? But, to particularize, if called upon as a physician to examine a case of alleged infanticide, after having made a post-mortem, would he not properly endeavor to obtain further light in the case, by obtaining a physical examination of the supposed mother, that he might connect the one inquiry with the other; and if, after proceeding thus far, the thoughts of obtaining a confession should occur, or be suggested, should he not endeavor to obtain the same, not by threats or promises, but by persuasion? And when he saw by the manner and actions of the suspected party there was good prospect of obtaining such confession, he should continue his efforts, should he not be applauded as a faithful witness and an honest citizen? Such then are the circumstances of this case, and these remarks show all that we have to say under this head.

The spirit of these conclusions may be found in Dean and Taylor's *Medical Jurisprudence.* And a still more rigid course is pursued in some of the German courts (see *North American Review*, late No.) in the search of criminality.

Our next division is—

III. A consideration of the legal doctrine "live birth."

It will be perceived that none of the medical witnesses in this case testified that the hydrostatic test was an evidence of live birth in the legal sense.

Strange as it may appear, most legal authorities hold that the child must be entirely without the mother's parts to constitute birth, and this is qualified by some that the child must be capable of supporting an independent existence. One authority, we remember, holds that the child will be considered "born," although the cord may not have been divided after delivery. Physicians can not see the propriety of this definition. Doubtless it had its origin in a desire to be on the merciful side, ere punishment was inflicted, in a truly laudable attempt to give the prisoner the benefit of "*a doubt.*" But this principle of justice, however meritorious it may be, has, we fear, remotely favored the production of infanticide, for it is a notorious fact that but *very* few criminals are convicted of this offense.

It is, too, a dangerous position, because a child may be born *in part*, and murdered, and no *adequate* law can reach the case. Even were it shown by the admission of the mother, or other party present, that at such a stage of the labor the child was murdered, it would constitute no *capital* offense against the law.

But, it is maintained, the law must set a fixed line where labor ceases and external infant life begins; and this her edicts say is when the child shall have been expelled from the mother entirely. But this fixation is objectionable, knowing that we can determine the nature of the child's vitality, by showing the stage of the mother's labor; but hoping rather to demonstrate the stage of labor by showing the *vital character* of the child.

It is proved beyond controversion, that the child may, in some few cases, breathe before it is born in the legal sense, but these cases are exceptional. In such we have evidently an independent life commenced, yet not fully protected by the law. Take a case: a child's head is born, and a blow on that part feloniously killed it; the child is murdered, yet the law can not punish for murder, because it is not born in law.

The question soon turns practically to the point, Was *the* particular child criminally destroyed, or did it die naturally after such partial birth? How can we determine this question? We answer, if with the respiratory signs present we

have those of asphyxia, and there are no marks of violence on the child, and the history of the case evinces a tedious labor, and its circumstances show no homicidal intention, and no fears need be entertained of conviction in such a case. It is not to such cases of infanticide that we refer, but to those not fully born, in which the child evidently breathed, and was plainly murdered, and yet the legal definition of live birth will effectually prevent adequate punishment. But there is yet another class of these cases that dictate the removal of this definition, viz: those negative examples where the child has been entirely born, but respiration so imperfectly established as not to be perceptible during infant life, or proven after death, and where the circulation proceeds at a feeble rate. According to *this* definition such infants live, when in reality they have no *independent life whatever.* It is true that such cases generally are in proof by other parties than the mother, and that they mostly die; but examples may occur unwitnessed, and the physician be called to prove that this child never lived, which he can not do, for the legal definition of live birth stares him in the face; for he is aware that although he can discover no respiratory signs of life, the child may yet have been "born alive" in the legal sense. These defects would seem to dictate a change in the law on this point, and what should this be? With great deference to what may be the opinions of others on this point, we suggest we have already alluded to it under the head of atelectasis, there holding that no infant can be deemed responsible, or to possess independent life, until *consciousness* has been established; and as we know this is not shown until respiration has begun, therefore the presence or absence of respiration in these cases should be the great test of live birth.

This certainly is safe doctrine for the mother in this class of cases, because we can conceive of no cause which will arrest birth and destroy the child, which would not show in or about the mother or child after the birth. According to this view, if the child does not breathe, it cannot require the protection of the law so far as infanticide is concerned; the question then turns to the crime of fœticide, which we are not considering. But to illustrate: If a child present with a wound upon its head, and the attendant circumstances show that in all probability the *mortal wound* could not have resulted from accident, and there are evidences of respiration having been established, and no congenital defects of the child which could produce *unconsciousness*, it is evident that consciousness following respi-

ration was established, as this state is the known effect of respiration; and the criminal should be held responsible in such a case after it had been sifted in all its bearings.

In the fixation of this doctrine we have advanced in principle, yet it still remains to be shown in each case of alleged infanticide that the perils of labor may not have destroyed the child after consciousness was established, or that the want of consciousness may not have been produced from disease of the mother or child, or from accident. But these objectionable cases are rare, and if their rarity be insisted upon by the defense, and the *non-existence* of such be not proven by the prosecution, the exception does not prove the incorrectness of the principle, but only that it was not useful in the particular case, or that the prosecution did not properly develop the case.

The law claims that any motion (and crying includes motion) of the child is an evidence of life; but if the child should move its head ere the body was born, and it was observed, it would be no evidence of independent life, although obviously i might have been born alive and was murdered. The law, however, does not hold that crying is any more than an infantile motion, showing life, and does not point to its denoting the establishment of consciousness, which act ninety-nine times in a hundred brings the conviction to us in the new-born infant of independent infantile life.

From these considerations we believe that consciousness should be the great test of the independent life of the child: prove this and the infant may be murdered and the criminal be responsible *for murder;* and if the principle is not established, we cannot see how murder of an independent being can be inflicted. From this it follows that the removal of the old doctrine of "live birth," and the substitution of that of "independent vitality," and the keeping in view that *without respiration* we cannot have *independent* infantile life, would further the ends of justice, and bo more safe, because more effectual, than the present law.

INFLUENCE OF CLIMATE ON PHTHISIS.

We find the following statement in the *Medical Times and Gazette*, which did it not betray a great want of knowledge on a subject which deeply interests the welfare of thousands, would be really amusing:

"The Empress of Austria, who, as your readers are aware, went some time ago to Corfu, under the care of Professor Skoda, for tuberculosis of the lungs, is reported considerably improved. The heat of Corfu is at present very great, amounting to 95° F. at mid-day, to 77° in the evening, and only a little less in the morning. Sudden changes of temperature, however, never take place, and even after sunset walking in the open air is not injurious to the patient. The climate of Corfu agrees remarkably well with the Empress, and the infiltration of the lungs, which had made alarming stride of late, has become stationary. The cough has quite ceased, and the general health of the illustrious patient is much improved. It has not yet been determined where the Empress will pass the winter, but it is settled that she leaves Corfu on its approach, as the winter there is not suitable for delicate patients suffering from diseases of the chest."

If we are to consider the climate of Corfu favorable for phthisical patients, where "walking in the open air after sunset is not injurious to the patient," we hardly know how high we ought to rate the climate of California, where not only can our patients walk in the open air after sunset without injury, but where they can sleep in the open air during six months in the year, with manifest advantage. During the past summer, we have had phthisical patients camping out in the mountains, and sleeping under the trees, in whom not only has the infiltration of the lungs become stationary, but in whom it has entirely disappeared.

Whilst on the subject of phthisis, we will endeavor to give as literal a translation as possible of a communication by Mr. Piorry, presented to the Academy of Medicine in Paris, furnishing, as it does, a sufficient reason why phthisis should still prove itself incurable to physicians of the older school.

"M. Piorry read a communication on the treatment of pulmonary phthisis. The author enumerated the long list of remedies that had been brought forward at different times

against tuberculosis, and endeavored to prove that the use of the greater part of these remedies and therapeutical methods was founded either on a blind empericism, or on hypothetical theories. He observed that all the means of treatment had been finally condemned by clinical experience, and he believed that the only rational treatment of pulmonary phthisis, is that which reposes on the precise indications furnished by the exact or plessimetric diagnosis of monorganisms, and which, prescribing all the pretended specifics, combats each lesion, local or general, by the treatment it requires. M. Piorry insisted more particularly on the necessity of favoring expectoration, and thus preventing the *anoxemia* which migh result from the retention of muo-purulent secretions in the acrea-tree, on combatting the *splenemogolia* by sulphate of quinine, and the *chloro-anemia* by ferruginous medicines."

Some twenty years ago, we listened with both pleasure and profit to M. Piorry's lectures on Diagnosis, and we only regret that, at least as regards pulmonary consumption, the only progress he appears to have made since that time, has been in the invention of a barbarous and unintelligible nomenclature. As well might we treat gout by applying a cooling lotion to the great toe, as to base our treatment of phthisis on expectorants and other drugs. Behind the pulmonary disease exists the tuberculosis of the system, which must itself be remedied, if ever we hope to treat phthisis successfully.

We have already pointed out, in former numbers of this Journal, how this is to be effected—it certainly can never be accomplished by drugs.—*Pacific Med. & Surg. Journal.*

REMOVING THE CLITORIS IN CASES OF MASTURBATION,

ACCOMPANIED WITH THREATENING INSANITY.

BY E. S. COOPER, A. M., M. D.,
Professor of Anatomy and Surgery in the Medical Department of the University of the Pacific.

The proper management of inveterate cases of masturbation, in both sexes, is a subject of great importance to medical men, in view of the fact of the practice causing a degeneration of intellect, and even insanity itself. These case are far more numerous, in every country, than they are supposed to be, except by medical men. Being subjects of great delicacy, they

remain, as they should be, secrets between the family and medical adviser. Though these are matters of a very private nature, they should always be freely discussed by medical men the more so, since very little has, thus far, been done to ameliorate the condition of the more unfortunate victims of this practice, who have progressed towards approaching insanity. But to the inexpressible anguish and chagrin of their parents and the most profound pity of all who know anything of them, they often degenerate, physically, morally and intellectually, until they pass out of the reach of medical aid, and become hopelessly lost. At no time does the practitioner feel more keenly the inability of his art to save, however often he may have to deplore his inefficiency in arresting the progress of some fatal malady. Death is infinitely preferable to insanity from this cause.

What can be more deplorable than to see a little girl, twelve or fourteen years old, the daughter of intelligent, high-toned parents, and naturally bright herself, but so far advanced in the practice of masturbation and mental degeneracy as to be entirely unable to govern herself, even after the habit is observed, and the fearful consequences of continuance fully explained to her? Or what can call forth, to a greater extent, our heartfelt commiseration, than to see a youth, with fine mental endowments by nature, just verging into manhood, finding his mental and moral energies failing, under the influence of a practice, the noxiousness of which he had no idea, at the time of commencing it, but who, at last, finds a mental wreck almost inevitable, and who implores the surgeon to save him by any means, even that of castration. Though surgeons would hardly be justified in performing this operation, still in view of the awful results so often growing out of the practice of masturbation, when it has produced incipient insanity, and deprived the patient of the moral courage and firmness necessary to control the habit, we would be justified in resorting to almost any operation.

In the female, it would appear, judging from the result of two cases, as though we have found a remedy by surgical interference, and of such mildness and simplicity as to commend it to an early trial in all cases where the habit of masturbation threatens injury of the intellect. It consists in removing the entire clitoris, including the corpus cavernosum clitoridis, and the major portion of the erectores clitoridis. We will briefly detail the cases:

Case 1st.—Miss ———, æt. 13 years and 6 months, once a

beautiful bright little girl, whom I knew in the Atlantic States, eight years previously, was brought to me in July, 1860. At first sight of her, it was easy to recognize the bland, childish smile, which was one of her striking characteristics at the time I had seen her last. But, in conversation, I soon found that she had lost her former vivacity and brightness of intellect, but when we began to speak of her condition—which was begun by her mother, whose mortification at having to come upon such an errand, induced her to speak more from feeling than prudence—the little girl's face changed to a sort of idiotic ferocity, which made it but too apparent that insanity was fast absorbing her faculties. Although so young, she had already attempted to commit suicide, by trying to cut her throat with a razor. There appeared little chance of doing anything for her. She took, however, lupulin in 5-grain doses, three times a day, for some time, and her mother was admonished, in the strongest manner, to change her harsh tone towards her, and to endeavor to win her confidence and secure obedience, by kindness. This course was continued for two months, but with no effect. We could neither improve the condition of the nervous system, nor induce her to leave off her practice. The mother had her watched, day and night, and thought she might, in that way, prevent it altogether. But the child had a mode of crossing her thighs, and rubbing with them at the same time, so as to produce the desired result. This she would sometimes do with so little movement, especially while in bed, as to deceive those who were watching her, even after their attention was directed to the fact; and, what was singular in regard to this, sometimes she would confess, candidly, what she had been doing, and as often deny, most persistently, the practice altogether. The mother, being now almost frantic, had abandoned all hope of saving her from a permanent residence in the Lunatic Asylum, and implored me to do everything, try every experiment that offered the least probability of cure. The removal of the clitoris was then proposed, and its trial most willingly consented to by the mother.

Operation.—The operation consists in grasping the clitoris, back of the glans, with a pair of forceps, drawing it forwards, so as to place the erectores clitoridis and corpus spongiosum upon the stretch, when the whole mass was cut away, by the scalpel, with small portions of the nymphæ. Very little hemorrhage occurred, and the patient was quite comfortable the next day, though very melancholy, and recovered, without an untoward symptom.

The operation was successful in breaking up the practice, and the patient has very much improved in the mental faculties, all save the memory, which appears to be almost entirely destroyed.

Casi 2.—*Miss*——, œt. 10 years, was discovered to be in the habit of committing Masturbation, about six months prior to my being consulted, June, 1861. She was thought, by her mother, to be gradually becoming stupid, for some months previously, and her nervous system had lost, almost entirely, its wonted tone.

In July following, with the assistance of Prof. L. C. Lane, I removed the cliteris, as before. The patient suffered no particular inconvenience from the operation; remained in bed one day, and walked about, after that, as if nothing had occurred.

The result has been entirely satisfactory. The habit was broken, and the little girl began rapidly to regain her usual sprightliness, and is now from home at a boarding-school, whence she often sends letters to her friends. The letters show her to be a girl of extraordinary intellect, though, prior to the operation she had occasionally a vacant idiotic stare, which promised anything but her present bright state of mind. Her parents informed me that she had taught a little sister of hers, only two years old, the same habit, and that, at one time she thrust one of her fingers up the vagina of the little child. On examining the babe, we found the hyman not only ruptured, but the clitoris and vagina four or six times as much developed as they should be.

Remarks.—After these results, I think a surgeon should not only remove the clitoris, in all similar cases, but, if this should prove insufficient to effect a cure, he should remove the entire nymphæ, also, as they are very vascular, and possess erectile tissue of great sensibility, and are said to be parts often titillated in Masturbation.

Query.—What effect will these operations have upon the person in a married state? These parts are supposed, by many physiologists, to have much influence over sensual gratification. Some regard them, in fact, as the seat of venereal pleasure.

Practically, this matter does not come up in those desperate cases in which a destruction of the mental faculties is rapidly going on, and there is no other known way of curing the patient. But, in a physiological point of view, it is a subject of great interest.—*San Fransisco Med. Press.*

EDITORIAL AND MISCELLANEOUS.

The Sanitary Commission.—Etertaining at the outset of the present war a "generous confidence" in the government of the country, and knowing something of the gigantic means at its diposal, and the large number of well paid officials whose business it was to render those means efficient, we were among those who doubted the great necessity of the so-called Sanitary Commission. We regretted that its head and front was not, as common sense would have suggested, a practical medical man; and a variety of circumstances, not necessary now to be repeated, conspired to produce the conviction that the organization would ultimate in a failure.

But the immense resources of government were largely depleted by private peculation, as well as by the unexpected magnitude of the war.

Officials were found sometimes overworked, oftener slothful and negligent, and perhaps oftener still, either incompetent or altogether knavish.

The filling up of requisitions from regimental or brigade surgeons by the officials having the matter in charge was, and is, an almost unheard of thing. Whole regiments and even brigades have been kept destitute of the most indispensable medicines. Government hospital transports utterly unprovided with even the cheapest and most abundant of supplies for the sick and wounded.

And this, be it observed, without a shadow of negligencce or want of forethought on the part of the medical men detailed to the charge of them. The poor excuse of difficulty of obtaining these supplies cannot be made by the *head* officials, for the markets are positively glutted with them, and the holders are abundantly anxious to secure even the certificates of indebtedness of "our common Uncle."

The slightest skirmish has about invariably found the official hospital supplies and appliances defficient to a deplorable extent, whilst Fort Donelson and Shiloh, have shown an infini tesimal attenuation of positive necessaries, which would shame the pitiful attempts of the Homœpathists from Hanhemann downward to imitate.

We repeat there is not a shadow of an excuse for the failure of the officials to answer immediately and fully the requisitions made upon them for supplies by the brigade, regimental and hospital surgeons.

But there seems no help for it according to the present order of things, unless, perchance, these central officials be transplanted to some better paying or more honorable positions, and new and active, or at least honest men put in their places. (It is suggested by a friend at our elbow that a dozen foreign missions be created for them, if none are now vacant—and this perhaps would be the cheapest way in the long run.)

Public opinion would not permit the soldier to suffer, although he squandered his hardly earned wages for the sutler's trash, and although the powers that be were incompetent, neglectful or worse.

The Sanitary Commission, a self-constituted committee, was taken up by the profession and the public, and it is but simple justice to say that it has discharged the business assumed and devolved upon it in a way and to an extent which challenges the admiration of the country, as it has secured the unbounded gratitude of the suffering soldiery.

The amount of supplies, positive necessaries, conveniences, little luxuries and comforts, and attention which they have been instrumental in conveying gratuitously to the grand army is truly wonderful, and puts to shame the sleepy or scoundrelly army officials.

As soon as possible it is intended to give some of the details of this immense work and outlay to our readers.

We are proud to chronicle the large number of professional gentlemen who have contributed their personal services gra-

tuitously, and often at considerable cost, aside from time and interference with their current business, to the wounded and sick on the field and in the hospitals. In this respect, also, the Sanitary Commission are entitled to thanks. They have done much to secure the services of competent men, and at the same time to prevent the disabled soldiers from falling into the hands of charlatans and unfeeling experimenters. Our brigade and regimental Surgeons have been overworked and many of them have fallen victims to exposure and fatigue. They have needed, and will continue to require more help from Surgeons in civil practice. We trust that none who can go will be dissuaded by having once satisfied his curiosity, or experienced the hardships and privations of a military visitation. Meanwhile, honor to the Sanitary Commission.

DE WITT COUNTY MEDICAL SOCIETY.

The society met in annual session at the office of Dr. W. W. Adams.

The President, Dr. Z. H. Madden in the chair. The minutes of the previous meeting were read and approved.

On motion of Dr. Adams, Dr. Brown of Macon county, was invited to participate in the proceedings of this meeting. On motion the election of officers was postponed until the afternoon session. Essays were called for. Dr. T. K. Edmiston was excused from reading on account of sore eyes; but made a verbal report of a very interesting case of abscess of the liver. He also gave notice that he would read a paper on the formation and treatment of abscesses at the next meeting of the society. Dr. Shurtleff read an essay on diptheria in which he contended that it was a constitutional disease. This gave rise to a very interesting discussion; some of the members contended that it was only local. On motion, the society adjourned to meet at 2 o'clock, P. M.

AFTERNOON SESSION.

Election of officers being in order the following were duly elected:

John Wright, M. D.—*President.*
Dr. J. R. Richards—*Vice-President.*
Dr. R. T. Richards—*Treasurer.*
Dr. B. K. Shurtleff—*Secretary.*

B. S. Lewis, M. D., T. W. Davis, M. D., and W. W. Adams, M. D.—*Censors.*

Dr. Z. H. Madden, the retiring President, then delivered an excellent valedictory address which was listened to with marked attention. On motion, the address was ordered to be published in the *Central Transcript.* Dr. Brown verbally reported a very peculiar case in a child: The disease first making its appearance by swelling of the scrotum followed with fever, general depression and dark spots from the size of a dime to that of a bottom of a large tea-cup, having the appearance of extravasated blood. The doctor also spoke of four or five similar cases treated by physicians of Decatur and almost invariably terminating fatally.

Scalds and burns, the subject for general debate, was then discussed by most of the members present. Drs. W. W. Adams and D. W. Edmiston were appointed essayists for the next meeting. Mercurials in the treatment of disease was chosen as the subject for discussion at the next meeting of the society. Dr. R. T. Richards offered the following resolution which was unanimously adopted:

Resolved, that the thanks of this society are due and hereby tendered to Dr. Madden and lady for the excellent dinner prepared for the members of the society.

On motion, it was ordered that the proceedings of this meeting be published in the *Central Transcript* and Chicago Medical Journal.

On motion, the society adjourned to meet in quarterly session at Waynesville, on the first Tuesday in July next.

Dr. B. K. Shurtleff, *Secretary.*

☞ Subscribers will please direct business or money letters to Dr. Ingals, Box 14, Chicago, Ills.

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SELECTED.

ON THE TEMPERATURE, UREA, CHLORIDE OF SODIUM, AND URINARY WATER IN SCARLET FEVER, AND ON A CYCLE IN DISEASE AND HEALTH.

BY SYDNEY RINGER, M. D.

Communicated by Dr. Garrod, F. R. S.

The observations were made on patients in the Hospital for Sick Children, under the care of Drs. West, Jenner and Hillier. Thirty cases are given. The temperature, taken several times during the day, is given in charts. The urea and chloride of sodium were estimated daily by Liebig's volumetric method. The observations extended over a variable time, in some cases till the forty-fifty day of the disease.

I. *On the Temperature.*

1. This fell, in the great majority of cases, on either the fifth, tenth, or fifteenth day of the disease.

2. When the temperature remained high till the fifteenth or twentieth day, a fall of variable intensity occurred, usually on each of the preceding fifth days—namely, the fifth, tenth and fifthteenth. The temperature after each fall in some cases remained, during the subsequent five days, at the same point reached on the preceding fifth day; in other cases it rose again, reaching during the second or third five days a point as high as it did during the first five.

3. Each fall of the temperature is accompanied by an improvement in the state of the patient, which remains permanent when the temperature does not again rise.

4. Of seventeen cases that came early under notice, the average maximum temperature was a little above 103°.

5. Subsequent to the great fall experienced on the fifth, tenth, or fifteenth day, the temperature often remained rather too high over a variable time, in some cases for fifteen days. The degree of elevation varied, in some cases being between 100° to 101°, but more frequently between 99° and 100°. This elevation of the temperature also usually experienced a fall on each fifth day.

6. This subsequent elevation of the temperature, if of any persistence, was coincident with a continuation of the lesions produced by the scarlet fever, as sore-throat, &c. It sometimes preceded an attack of Bright's disease.

7. At a variable point after the scarlet fever, another elevation of the temperature occurred, due either to Bright's disease, endocarditis, tuberculosis, or chicken-pox; in two cases, the cause could not be ascertained.

8. The date of the second elevation varied; thus, counting from the commencement of the scarlet fever, in albuminuria the mean of six cases gave the twenty-second day; in two cases in which the elevation was probably due to endocarditis, the elevation began on the eighth day; in one case of chicken-pox, it commenced on the sixth day; in one case of tuberculosis, on the ninth.

9. The duration of the elevation due to the above causes varied from two to thirteen days.

10. This subsequent elevation of the temperature due to intercurrent disease always fell either on a fifth day from its own commencement or on a fifth day from the commencement of the scarlet fever.

11. Thus the temperature forms arcs of cycles, lasting in the majority of cases five days; this equality applies to the temperature of the scarlet fever, or of any subsequent intercurrent disease.

12. In severe cases the temperature remained at the same point throughout the day; in slighter cases it fell in the morning and rose during the day: this fall in the morning is one of the earliest signs of improvement.

13. The hour of the day at which the temperature reached its highest point varied greatly. It was most frequently at its highest at some time between two P. M. and eight P. M.

II. *On the Urea.*

1. The urea appears to suffer no increase during the fever.
2. The amount of urea for many days after the decline of the fever is far below the amount normal to the patient.
3. From the above, the author thinks it probable that the kidney is affected from the commencement of the attack, and the elimination of the urea thus checked. In some of the cases the children were puffy about the face, without any blood or albumen occurring in the urine; this perhaps was caused by the retention of urea.
4. On the intercurrence of Bright's disease, the urea in some cases was greatly diminished; in other cases no diminution occurred.

III. *On the Chlorides.*

1. The chlorides were never found absent in any of the cases analyzed.
2. Their amount was always much diminished during the fever days.
3. After the fall of the temperature the chlorides increased gradually.
4. In one case in which Bright's disease supervened the chlorides were estimated: they suffered very little diminution.

IV. *On the Urinary Water.*

Often during the fever there is no diminution in the amount of urinary water; in some cases it is increased.

V. *On the Albumen in the Urine.*

1. The albumen appears at two different periods: (*a*) during the fever days; (*b*) later, during the non-fever days. Out of 21 cases, it only appeared once during the fever days. Of 18 cases which were in the hospital for a considerable time, in 7 albumen appeared during the fever free days.
2. The time of its appearance varied from the ninth to the twenty-third day.
3. The duration of the albumen in the urine varied from three to forty-nine days.
4. There is no necessary connexion between the intensity of the inflammation (tested by the elevation of the temperature) and the duration of the albumen in the urine.
5. There is no necessary connexion between the intensity of the inflammation and the amount of albumen in the urine.

VI. *On Blood in the Urine.*

1. There may be an elevation of the temperature, due probably to inflammation of the kidney, without any blood in the urine.

2. In no cases did blood appear without previous elevation of the temperature.

3. In some cases the blood continued long after the fall of the temperature, and thus probably after the decline of the inflammation.

VII. *Relation between the Blood and Albumen in the Urine.*

1. A very large amount of albumen may occur in the urine without any blood.

2. Blood to a very large amount may occur in the urine with the slightest trace of albumen; and if the blood corpuscles be allowed to settle, the supernatant fluid may give no evidence of albumen.

These cases given were seldom dropsical; they, however, often looked puffy in the face. In some cases the second elevation of the temperature due to Bright's disease was not followed even by puffiness. In one case the patient was puffy, without any other indication of Bright's disease.

VIII. *On a Cycle in Disease.*

In the cases given the temperature did not run an equable course, neither remaining at the same temperature throughout; but formed cycles, composed of a variable number of days, each cycle, however, being composed of the same number of days in the same patient. The cycles in the great majority of cases were composed of five days.

INFLUENCE OF RAILWAY TRAVELLING UPON PUBLIC HEALTH.

Extract from Report of British Commission.

Physiological Influence.—*Habitual travelling.*—In considering the physiological influence of railway travelling upon public health, it is necessary to enlarge the sphere of observation beyond the mere act of travelling, and to regard some of the accessory conditions which surround it. Modern society has seized the occasion offered by increased facilities for busi-

ness communication, and multiplied its means of pleasure and chances of recreation. Habitual railway travellers are found not only amongst those who move from place to place, urged by some necessary impulse; but also there is included amongst them a numerous class of season-ticket holders who, from considerations of health, pleasure, or economy, locate their families at a distance, and daily travel by train to some great industrial centre; again seeking a country home in the evening. This most important class of travellers is especially subject to the extraneous influence alluded to. They are under the necessity of twice daily 'catching the train;' and to a certain extent all their actions prior to departure in the morning and afternoon are influenced by the pervading sense of this anxiety. We will quote here a graphic communication on this matter from Dr. Forbes Winslow.

Dr. F. Winslow on extraneous sources of anxiety and fatigue.—"I have, like many others, during the summer season, removed my family for a period to a watering-place some fifty miles from London, and travelled to and fro night and morning by express train. I have been convinced that the advantage of sleeping by the sea-side, and of an occasional day of rest there, was fully counterbalanced by the fatigue and wear and tear of mind and body incidental to daily journeys over this considerable distance. I went to bed at night conscious that I must rise at a given and somewhat early hour, or miss my train. I am sure that this does not render sleep more sound and refreshing; and every one sleeps best on the Saturday night; when this disturbing element does not exist—since the next is the day of rest. In the same way breakfast is eaten with this necessity of being in time still on one's mind. Then, like every one else, I had to get the cab or carriage and go down to the station; to scramble for the morning paper and get a seat. Then comes the long journey, with all its fatiguing accompaniments. Finally, one has to get to one's residence; this process, or something like it, *mutatis mutandis*, being repeated twice a day. I refer to these separate details because it is in analyzing the general series of phenomena that I am able to explain the fatiguing effects, mental and physical, of constant railway travelling."

Concurrent testimony of other physicians.—The frequent ill-effects of this anxiety and mental pre-occupation are insisted on in the communications made to us by many physicians of great experience. They have a most important bearing in relation to certain diseases which will be elucidated in a sub-

sequent section. Dr. Brown-Sequard observes, that the anxiety is so predominant in many otherwise healthy constitutions, that it produces often a practical incapacity for habitual travelling; and must evidently, when it falls short of this, frequently be injurious. When living near a railway station, he observed that the frequent excitement, and constant hurry and anxiety which he witnessed on the part of passengers arriving, impressed itself on his mind as a mischievous circumstance. In certain unhealthy conditions of the heart it has many times proved fatal.

But the actual fatigue and physical effects of the journey chiefly influence the mass; phlegmatic and robust-minded persons are little likely to allow themselves to be mentally agitated by the necessity for catching trains or the like. But let it here be noted, that a great number of the season-ticket travellers are men past the early vigor of life—time worn by the continued cares of business during long residence in towns, and whom a more or less tardy success in the battle of life has enabled to afford for their families the salutary change of country or sea-side residence, or whom some warning of failing health compels to seek for themselves such a transformed version of the *rus in urbe*. This is a sort of constitution not able to bear unnecessary strain and fatigue.

We will next consider what are the conditions inducing functional change to which travellers are subjected in a railway train, proceeding at ordinary speed.

Effects on the muscular system.—The immediate effect of being placed in a vehicle subjected to rapid, short vibrations and oscillations, as already detailed, is that a considerable number of muscles are called into action, and maintained in a condition of alternating contractile effort throughout the whole journey. The tendency of each movement is to produce more or less motion in the twenty-four pieces of which the spine is made up. These movements are counteracted, and the erect position of the body is maintained, by the adoptive construction of that complex muscular system attached to those osseous pieces. The more violent movements of the carriage call into action the various sets of muscles in the back and chest; and it is only by an incessantly varying play of contraction and relaxation that the body is preserved in a tolerable state of equilibrium, and that the passenger combats with success the tendency to be shaken into a most unpleasing variety of shapes and positions. The head is especially thus affected, being so balanced on the spine as to have a tendency to fall forward.

The frequency, rapidity, and peculiar abruptness of the motion of the railway carriage keep thus a constant strain on the muscles; and to this must be ascribed a part of that sense of bodily fatigue, almost amounting to soreness, which is felt after a long journey.

Influence on the cerebral and spinal centres.—The hollow cavities of the spine and cranium, thus partially steadied, by the muscle attached to them contain the great nervous centres, to which concussion of any kind so peculiarly hurtful that they are naturally cushioned on exquisitely-devised waterbeds or are slung by fibrous ligaments, which have the effect of deadening the shocks of ordinary movements. It is unnecessary to dwell upon the injurious effects of commotion of the brain or spinal system of nerves. Cerebral or spinal concussions, in their higher degree, annihilate the functions of those organs. In the milder forms they lead up to disease which, remaining for a long time latent, may still end in paralysis.

The jolting of a railway carriage is a series of small and rapid concussions; and it is worthy to be noted that these increase in proportion to the rate of speed, and that most of the trains by which season-ticket holders travel are express. It may therefore be judged, so far as anatomical grounds are concerned, how prejudical must be the influence of reiteral concussions.

The seats of carriages.—The well-padded and springy seats of first-class carriages do much to obviate the mischief of these concussions for those who can afford to travel by them; and it has been mentioned to us by a surgeon who, in a great manufacturing centre, is connected officially with several railway companies, that he has observed that men compelled to travel frequently by rail are fully sensible of the practical advantage thus offered by the padded or cushioned seats, and never, if they can avoid it, travel on any other. We believe that commercial travellers, as a rule, occupy first-class carriages, not as a luxury, but as a necessity of their nomadic life. But however this may be, it is right to notice a remarkable fact in the relation of different classes of railway travellers. In 1849 the third-class passengers formed about 51 per cent. of the whole number; in 1860 they formed more than 57 per cent. It therefore becomes a matter of simple justice that the railway companies consider the health of this important class of travellers. In condemning them to sit on hard wooden benches, which transmit fully the shocks incidental to the movement of the carriage, they submit them unnecessarily to one acknowledged source of evil influence on health.

The influence of railway travelling upon the brain cannot, however, be measured solely by estimating the character and extent of the concussions to which it is subjected. The brain is not only affected by the mind, but also through the avenues of the eye and ear; and by the excitement of the respiratory and circulatory systems.

Of mental influences.—The mental condition of passengers by train is commonly, perhaps, sufficiently placid and unconcerned; but several eminently careful observers have, in their communications, alluded to an often experienced condition of uneasiness, scarcely amounting to actual fear, which pervades the generality of travellers by rail. The possibility of collision is constantly present to such persons. And every one knows how, if by chance a train stop at some unusual place, or if the pace be slackened, or the whistle sound its shrill alarm, a head is projected from nearly every window, and anxious eyes are on the look-out for signs and danger. So, too, the frequent lateness of trains, and the bad time which they keep, are causes of anxiety. The pace, also, prevents the traveller from observing natural objects and sites of interest on the road, which made coach travelling a source of mental relaxation and a pastime. The passenger is forced into subjective sources of mental activity; and where the tendency to excitement exists, this also, *quantum valeat*, must be esteemed an undesirable feature belonging to this manner of locomotion.

Effect on the eye.—Objects on the road are passed with such velocity that they only produce momentary impressions on the retina; and thus the visual powers are severely tried. The rapidity with which the brain is necessitated to take cognizance of the retinal images taxes it also more or less heavily. The rapid impression of objects moving over the retina in railway travelling is productive of certain interesting physiological phenomena, to which we can only briefly allude. Sir David Brewster has touched upon some of them with the ability for which he is distinguished. In a paper read at the last meeting of the British Association, and which will doubtless be published in the forthcoming volume of the "Proceedings," this great physicist showed that "when we look at the lines which stones, gravel, or other objects form in consequence of the deviation of their impressions on the retina, and quickly transfer the same lines further back, where the velocity is less, the stones or gravel or other objects would for an instant be distinctly seen, just as we see distinctly rapidly revolving objects in the dark when they are illuminated by an electric

flash, or the light of an exploded copper cap." This phenomenon may be explained by a remarkable and interesting law of compensation. The rapidity and variety of the impressions necessarily fatigue both the eye and the brain. The constantly varying distance at which the objects are placed involves an incessant shifting of the adaptive apparatus by which they are focused upon the retina; and the mental effort by which the brain takes cognizance of them is scarcely less productive of cerebral wear because it is unconscious; for no fact in physiology is more clearly established than that excessive functional activity always implies destruction of material and organic change of substance. Dr. Budd, F. R. S., has directed our attention to the peculiarly dazzling effect of passing in rapid succession the white telegraph posts, from which the wires seem to fall and rise, appearing to the eye to undulate. When the traveller sets himself to read, he imposes yet further labor on the eye in tracing the shifting characters of his book or newspaper, and also on the brain. Especial notice is drawn to this point in an important communication which we have received, and shall hereafter publish in full, from Mr. White Cooper, surgeon-oculist to the Queen. Every one is conscious of the strain upon eyesigt incidental to railway travelling and to reading in the train; but it is probable that few habitual travellers are sufficiently cautious in this matter, and that many only become wise by too tardy an interpretation of their personal experience.

Impressions through the ear.—The rattle and noise which accompany the progress of the train create an incessant vibration on the tympanum, and thus influence the brain through the nerve of hearing. Noise is conveyed by vibrations of the air; and hearing is the transmission to the brain, through the medium of the auditory nerve, of those measured vibrations which constitute special sounds. The habitual traveller is little mindful of it, and the brain of many persons is perfectly tolerant of the excitement. But this is an important item in the general cerebral impressions produced. Dr. Fuller of St. George's Hospital, in communicating his personal experience of the influence of habitual railway travelling, mentions a device adopted by him which furnishes at once a test and remedy for this source of cerebral excitement. Surmising that some part of the headache and mental fatigue experienced was due to the rattle and noise, he filled each ear with a light plug of cotton-wool. In this way the vibrations of the air in the meatus were arrested, and the relief is described as having been considerable.

Assailed through the avenues of the eye and ear, and subject to concussions due to vertical movement and lateral oscillation communicated through the trunk, and actually transmitted by the bony walls of the head when it rests against the back of the carriage, the brain is apt to suffer certain physiological changes. Amongst the well-known effects are—occasional dizziness, headache, sickness, and mental fatigue.

Combined effects on the brain.—To these results each of the above causes may contribute something. The noise may be considered most influential in producing headache; but this may be added by the impression of rapidly-passing objects on the eye, or by the effort of reading. For nothing tends more certainly to produce congestion of the base of the brain than the forced fixation of the eyes upon a near object. This is evidenced by experiment, and explained by the connexion of the circulation of the eye with that of the brain, through the ophthalmic artery, springing from the circle of Willis. Some powerful illustrations of this fact are afforded in the phenomena of hypnotism and electro-biology, and of some of the so-called mesmeric phenomena, where sleep and the required changes of the cerebral circulation are physically produced by fixing the eye upon an adjacent shining body. The mere aspect of a swinging object sometimes suffices to produce sickness, as in the late celebrated Dr. Jas. Johnson; and so rapidly-passing objects may aid in the frequent production of nausea in the train. Probably the concussion incidental to the movement of the train is more potential in bringing about this effect. The influences on the respiration and circulation will hereafter be mentioned.

Any sudden alteration of the heart's action may aid in producing giddiness and dizziness, which are not always felt during the journey so strongly as after leaving the carriage. And it is when the circulation is returning to a more regular standard that temporary access of sickness and vertigo is often experienced. These symptoms have been especially noticed in the case of the travelling Post-office officials, as to whom Dr. Waller Lewis, the medical superintendent of the Post-office, has communicated to us a most valuable mass of information, which will appear in the third Report.

Nausea and sickness.—The tendency to nausea sometimes felt by railway travellers, without any apparent complication of cerebral disturbance, is often due to jolting of the intestines and gallbladder, stimulating the latter to discharge its contents into the stomach, and thus excite biliary sickness. Many

cases have been communicated to us of sickness induced by railway travelling, and some persons are unable to undertake a journey without providing against this unpleasant affection. Bilious subjects Dr. Walter Lewis considers, from his experience, to be unfit for the travelling service, and he rejects such candidates for that employment.

The nervous influences.—In the valuable communications on the subject of this inquiry made to us by Dr. Brown-Sequard, the probable cause of sickness is explained by reference to the influence of the movements in a railway carriage on the phrenic, splanchnic, and vagus nerves. It is known by the experiments of several physiologists, that irritation of the vagus nerve produces vomiting; and the jolting of the stomach, separating it from the diaphragm and producing corresponding traction of the œsophagus, (which is attached to the diaphragm, when passing through that muscular septum,) is admitted by physiologists to afford the best explanation of the ordinary phenomena of sea-sickness. A second cause of vomiting, as shown by Luschka, is the irritation of the phrenic nerves due to the shaking of the diaphragm. Dr. Brown-Sequard, in former publications, has already investigated this subject experimentally, and has not only given confirmation to these observations, but has carried them further; and the result of his experiments will serve to give the physiological explanation of the peculiar *faintness* always accompanying nausea arising from the movements of a ship or railway carriage. He has shown that irritation of the sympathetic nerve in the abdomen induces cardiac syncope by a reflex action, influencing the action of the heart through the impressions conveyed by the splanchnic nerves acting upon the vagus through the spinal cord and medulla oblongata. The reflex character of the phenomena can be demonstrated by dividing the vagus in animals, when the irritation of the sympathetic no longer produces this cessation of the heart's beat, or by the division of the spinal cord between the communication of the sympathetic and the origin of the vagus, when a similarly negative effect is produced. Thus the faintness which sometimes occurs to travellers in a railway carriage, and the sickness accompanied by faintness, equally find their true scientific explanation. Every one has observed the marble pallor which accompanies this nausea; it is simple the result of a true fainting of the heart always preceding this form of sickness. It is needless to insist upon the important application of this physiological fact to all those persons who,

being the subjects of fatty degeneration or other disease of the heart, are most likely to suffer from this kind of syncope, and in whom the organ may less readily recover from the temporary paralysis. There are two remedies of great value in diminishing these evil effects. A thoroughly tight bandage around the abdomen ; inasmuch as it prevents, to some extent, the shaking of the stomach, and consequent irritation of the vagus nerve, so precluding the occurrence of sickness ; and chloroform taken into the stomach may similarly prevent or diminish the annoyance by partially paralysing the vagus. —*London Lancet.*

THE ACTION OF THE SECOND CLASS OF VOLUNTARY MUSCLES,

That they are attached at both extremities ; but their action is that of extension and retraction, simply.

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84. For the plainest instances of this action, we must again have recourse to some of the inferior orders of animals. The land Terrapin furnishes several instances of this character, in the protrusion of its head, in the opening of its valves, &c.

From that part of the interior of the Carapax or top shell that corresponds to the lumbar vertebræ. Each of these muscles has three distinct heads or bundles of longitudal fibres, the longest of which arises from the most posterior vertebræ, and extending along on the side of the dorsal and cervical vertebræ, is inserted into the Occiput ; the other two bundles of fibres arise a little in advance of this, and are inserted into the two cervical vertebræ nearest the head. Any one, who understands this arrangement of the muscles, and who has become acquainted with our view of muscular action, will readily comprehend how the head of the Terrapin is protruded, simply by the inervation and consequent elongation of these muscles ; and he will readily comprehend how the head, when protruded, can be retracted within the shell, by the withdrawal of the nerve-fluid from these muscles.

85. In order to protrude the head, the Terrapin must first open its shells for this purpose. This it does by pushing down the anterior valve of the Plastrum or bottom shell, by which

the space between the shells is closed. To enable it to do this, it is provided with two muscles, arising one on each side of the anterior dorsal vertebræ, which, passing down on either side of the neck, are inserted into the front edge of the anterior valve. By elongating these two muscles the valve is pushed down and the shells opened. The limbs of this animal are protruded and retracted by a similar arrangement of muscles, destined to this end.

86. The Snail (Helix nemoralis) presents some remarkable instances of the action of muscles that belong to this class. The soft parts of this animal consist mostly in a large bundle or mass of longitudinal muscular fibres, with which the several parts, as the head, the foot, &c., are protruded from the helix or turbinated shell; that is, by the active extension of these fibres.

The eyes of the Snail may be observed, when the animal is in motion, at the extremities of two fleshy tubes, or horns as they are commonly called, projecting from the head. From the mass of longitudinal fibres, two separate bundles or distinct muscles arise, and passing through the visceral cavity and traversing the horns, are inserted, one around the base of each eye, at the extremities of these horns. When the Snail is at rest, the Opthalmic muscles are retracted, the horns inverted, and the eyes are thus securely packed away in the visceral cavity; but when it is aroused, and protrudes its head and foot, it also determines its nerve-fluid to the Opthalmic muscles, and by elongating them, pushes forth its eyes. The horns are tubes filled out with muscular fibres placed spirally about the walls; and when the longitudinal muscles are extended these fibres are also extended; and in this way the calibres of the horns are enlarged, and thus allow a free action of the internal muscles with their nerves and blood-vessels.

It will be observed that there is a striking resemblance in the arrangement and action of the muscles in this instance to those in the instance formerly mentioned of the tongue of the Ant-eater. The explanations given by Physiologists of these two phenomena are the same, and both are equally absurd. They say, the eye of the Snail is everted by the contraction of the spiral muscle of the horn! The longitudinal muscle, they suppose, is intended and used solely for the purpose of retracting the eye!

87. We will advert to but one other instance of the action of the muscles of this class; it is to that of the muscles of the body of the Leech. This animal is possessed of two fleshy

discs, one at each extrimity of the body, by means of which it attaches itself to the surface on which it crawls; the discs acting as cupping-glasses, and taking a firm hold wherever applied.

The walls of the body of the Leech are mainly composed of muscular fibres, that are arranged in three distinct layers. The fibres of the outer layer are disposed circularly, those of the middle layer spirally; but the fibres of the internal layer are all arranged longitudinally. By means of the later layer of fibres the progression of the leech is effectual. When stationery, the discs are attached to a surface near each other; but when about to move forward, the leech first detaches the anterior disc, and then extending its body by elongating the longitudinal muscles, it again attaches this disc to the surface on which it is crawling, or to some near object. When this anterior disc is fixed, the posterior one is detached and brought up, by the retraction or contraction of the same muscles, to be attached again near the former. In this manner the leech moves from point to point in its progress, sometimes with considerable celerity. In the same manner, the progression of all crawling animals, Annelidans, Serpents, &c., is effected. They first fix some part of the body, and from this point the body is extended by the elongation of the longitudinal muscles, when they again fix the forward portion of the body, and by contracting these same muscles by withdrawing the nerve-fluid from them, they draw up their length from behind.

But why do I say this of *crawling* animals? when the same mode of progressing is common to *all* animals; as will be explained further on.

ACTION OF THE THIRD CLASS OF VOLUNTARY MUSCLES.

88. The sphincters or sphincter muscle that belong to this class are composed of fibres arranged circularly around the openings about which they are placed, as the Orbiculares palpebrarum, the Orbicularis oris, &c. In a state of rest or of repose these muscles are moderately contracted, and the openings are closed: they may be more forcibly contracted and the openings more firmly closed by an intentional, persistent withdrawal of the nerve-fluid from their fibres. But when it is designated to bring into use the eyes or the mouth, the sphincter muscles are innervated, their fibres become actively elongated, and the openings are dilated or expanded.

The error that has prevailed in relation to the action of these muscles has arisen from the difficulty in distinguishing the

consciousness that attends the innervation of the muscles from that which attends the withdrawal of the nerve-fluid from them. The early physiologists mistook the one consciousness for the other; and this mistake has continued in the books to the present time. They supposed that inervation was attended with the active contraction of the muscles and the closing or shutting of the openings. The really active state of the muscles they called relaxation, and supposed it was the result of inaction, or of an absence of the cause of action.

89. The instances of the action of the voluntary muscles we have already presented, are so plain, and the explanations given of the phenomena attending such action are so simple, intelligible, and rational, that, it appears to me, they must produce in every well ordered, unsophisticated mind that considers them, a full conviction of the truth of the law of muscular action that we have suggested.

The absurdity of former explanations of some of the above phenomena we have pointed out in passing; but there are, besides, explanations of others of these phenomena, given in accordance with the old theory, equally absurd and unphilosophical to which we have not adverted. The explanations to which we allude are founded in sophistry, and are clearly traceable to this source.

Finding it utterly impossible to furnish a rational explanation, with the received theory, of phenomena such as are presented in the protrusion of the tongue of the Serpent, above referred to, the Sophist, to get around this new difficulty, *invented a new term*, by which all the facts of the case are obscured, covered up, and ignored. The organs, the action of which he could not explain, which are said to be composed of *erectile tissue.* He did not stop to demonstrate even to himself this particular tissue, which in reality has no existence, (for these organs, like all the other soft parts of the animal body, are possessed only of the cellular, the muscular, and the nervous tissues.) This was no part of his design, his sole object being accomplished by the invention of the *term* that would serve, as it has served, to deceive the unwary and unreflecting. It is thought by these, to be a sufficient explanation of all such phenomena to say, that the organs concerned, are composed of erectile tissue, and become erected when actively elongated.

The idea commonly attached to this state of these organs is, that they are injected with blood, and are in this way extended. The fallacy of this idea is easily shown, however, by calling to mind the facts, that these organs are elongated before receiving

their extra supply of blood; and that, in many of these instances, the celerity of the motion of the organ, as in the case before us, entirely precludes this idea. The blood could not, by any possibility, be transmitted through the vessels, with a velocity to correspond with the motion of the tongue of the serpent, as indicated above.

ACTION OF THE FOURTH CLASS OF VOLUNTARY MUSCLES,

That are attached at both extremities, but make use of the bones as levers.

90. It is more difficult to convey a just conception of the action of this than that of any other class of voluntary muscles; because the means employed to produce the results are, here, much more complicated. The bones of the limbs to which these muscles are attached, and which are made use of as levers, are provided with two distinct sets of muscles, one on each of the two surfaces towards their line of motion; and their motion is not produced by the action of either set of muscles exclusively, but is caused by forces exerted by both sets at the same time. I repeat, the movement of the limbs of animals is not due exclusively to the action of either of the two sets of muscles with which they are supplied, but each movement is effected by the action or active elongation of one set, and by the contraction of the opposing set.

91. Before entering upon the explanation of the action of this class of muscles, it will be well to call to mind three important truths, that are essential to a clear understanding of this action. These are, First, that the action and the contraction of a muscle are both vital phenomena, to be met with only in the living body, and are not represented elsewhere in any part of the ecomomy of nature. These states of the muscle in the living body are *sui generis*, and no proper conception of them can be gained by comparing them to those of a cord or pulley of any kind or of any condition, whether as wet or dry, elastic or inelastic, &c. Second, that the contraction of a muscle is as much the result of the operation of a law of nature depending on the presence of, or the determination to it, of this fluid; and Third, that the operation of a law of nature is always attended with force or power, as well as its action or active elongation.

Force, it must be admited, is exerted in connection with the contraction of a muscle; but it is all important that we should not associate in our minds the force, with this state of the muscle, and then call this state of contraction the state of action of the muscle. This is the grand mistake committed by Physio-

logists, that has led them to overlook entirely the true state of action of a muscle, together with the force that is also exerted in connection with this state; and this mistake has led to their confusion of thought, and defective and erroneous views on the subject of muscular action.

I must repeat, the active state, or the state of action of a muscle, is a state of active elongation of its fibres; and in connection with this state, force or power is always exhibited.

92. With the knowledge of the above truths, the explanations we proceed to give of the action of this class of muscles will be rendered intelligible. The instances we shall select for this purpose will be such as are plainest and most familiar; that is, those that are to be observed in the action of the muscles of the limbs, upper and lower, of the human subject.

The action of these muscles are so misunderstood by physiologists, and so misrepresented in the books, that the technical terms employed to designate them are calculated to mislead. I shall, therefore, discard these terms as much as possible from our present consideration, and substitute others. In doing this, let it be understood, that those I propose are suggested only for a temporary use—to simplify the subject to the general reader, and to elucidate the principles involved. I hope, however, that some new terms for these muscles may be permanently adopted that will be more expressive of the true facts of the case than those now employed.

93. The muscles on the anterior surface of the Humerus or bone of the upper arm, embracing the Biceps and Brachialis anticus, we shall regard as one muscle, and call it, from its position, the Præ-humeral muscle; and that on the posterior surface of this bone, the triceps, we shall designate as the Post-humeral muscle.

The Præ-humeral muscle, then, arises from the shoulder blade (scapula) near the joint of the shoulder, and from the bone of the upper arm, and passing along its anterior surface is inserted into the upper portion of the bones of the fore arm.

The Post-humeral muscle arises also in part from the scapula, and in part from the humerus, and passing along the posterior surface of this bone is inserted into a process of one of the bones of the fore arm, called the Olecranon process, that projects behind the joint at the elbow.

94. When the whole arm is extended or straightened out from the flexed position, the mode in which this extension is effected by means of the muscles just mentioned, after what

has been said above, is plain and palpable. In this movement, the anterior or Præ-humeral muscle is actively elongated by the determination to it of the nerve-fluid; and at the same time the posterior or Post-humeral muscle is contracted by having the nerve-fluid withdrawn. The motion, it will be observed, is produced by both muscles, the anterior and the posterior; but the former only is in action, or is influenced by the cause of action—the nerve fluid—it is in a state of vital erection; while the latter is thrown into a peculiar condition, that of contraction, by the abstraction of the cause of action. Both of these conditions, that of active elongation and that of contraction, in the opposing muscles, are essential and indispensable in every movement of the limbs, and each of these conditions being the result, as we have seen, (87) of the operation of a law of nature, such movements are executed with a double force, or with two forces, one of which is derived from the operation of each of these laws of nature.

The opposite movement of the arm—the flexing it at the elbow from the straight position—is produced by an opposite condition of the muscles engaged. In this movement, the posterior muscle is innervated and elongated, while the anterior muscle is contracted. This action of the posterior muscle is better shown, however, in the following instance:

95. The action of the muscles by means of which the fingers are moved, will be best shown by regarding them as two muscles, one on each surface of the bones of the fore arm, from which they arise. We will call them for the present, the Præ-brachial and the Post-brachial muscle, each term embracing the long muscles that go to the several phalanges of the fingers on its respective surface.

The anterior or Præ-brachial muscle arises from the bones of the fore arm towards the elbow, on the inner surface, and extending along in front, passes with its long tendons across the palm of the hand, to be inserted into the several bones of the phalanges of the fingers on their inner surface.

The posterior or Post-brachial muscle in like manner arises from the upper portion of the same bones, but from their outer surface, and passing along on this surface, and with their tendons over the back of the hand, are inserted into the bones of the phalanges of the fingers on their outer surface, extending along even to the extremities of these bones.

96. The great difficulty in realizing the true action and agency of the muscles we have just spoken of, arises from the fact mentioned above, when speaking of the sphincters; namely, that few minds are capable of distinguishing the

consciousness or the mental sensation that attends the determination of the nerve-fluid to a muscle, that causes its action, from the consciousness or sensation that attends the abstraction of this fluid, that causes the contraction of a muscle. To make this distinction, it requires a patient education and training of the mind, more especially in those who have given some attention to physiology, and who have their minds pre-occupied with erroneous views of muscular action. This mental preparation, however, is what few or none have set about; but when this difficult task is accomplished, it will be observed, that,

97. In flexing the hand, as in forcibly shutting it, or in grasping any object firmly, a determination of the nerve-fluid is made to the posterior or Post-brachial muscle; and its fibres becoming actively or forcibly elongated, tend to produce the movement indicated; at the same time, the nerve-fluid is withdrawn from the anterior or Præ-brachial muscle, and its fibres becoming forcibly contracted, the act of shutting the hand, or of grasping, is perfected and completed.

The opposite states of these muscles—that is, the innervation and extension of the anterior, and the enervation and contraction of the posterior muscle—it is evident, would produce the contrary movement of the fingers, the extending or straightening them out.

98. If I have succeeded in explaining to the satisfaction of the reader, the action and agency of the muscles engaged in effecting the movements of the upper extremities, there will be no difficulty whatever in his comprehending the action and agency of the other muscles of this class that are concerned in the various voluntary movements of the living body. In all such movements, we repeat, two sets of muscles are concerned, whose action is opposed, the one to the other; but the position established is the result of the agency, mainly of the set that is in a state of action, although in some measure attributable to the contraction of the opposing set. Thus, in assuming and maintaining the erect position of the body, the muscles, on the anterior surfaces of the lower extremities, of the spinal columns, and of the walls of the abdomen and thorax, are brought into action, and the result is accomplished, principally by the agency of these muscles, but in some measure also, by the contraction of those on the opposite surfaces. Again:

99. In locomotion, of the biped, for example, it is true, the hinder foot is brought up to the advanced position; and, again, the foot is raised to be carried forward by the contraction of one set of muscles; but the progressive motion—the

extending the leg and foot in advance, and the projecting forward of the whole body—is effected by the action, the active elongation, or extension of the other set; or the opposite conditions of the same muscles may be employed for both of these purposes.

The mode of progression, we have said, (87) is the same in all animals. In all, a portion of the body is advanced from a fixed point by the action or extension of certain muscles, and in all, a portion of the body that is behind this point is brought up by the contraction of certain muscles. In this respect the halting gait of the biped—that is to say, when, in walking, he keeps the same foot always in advance, bringing up the hinder foot to it, and then moving the front foot forward again—is the same with the natural gait of the snail; and, again, the snail would imitate the natural gait, or the continued progressive motion of the biped, if, instead of attaching its hinder disc in the rear of the front one, it could carry it along forward, and attach it in an advanced position, and so continue its motion, carrying its discs alternately forward.

100. The arrangement of the muscles, however, in the lower extremities is somewhat different from that of the upper. The extension of the leg on the thigh is effected by the action of the muscles on the posterior surface of the thigh bone or femur, while the leg is flexed on the thigh by the action of the muscles on the anterior surface of this bone; and, again, the action of the tibialis anticus, and of the anterior longus digitorum on the anterior surface of the leg or tibia, tends to extend or straighten out the foot on the leg; and of the latter, to flex the toes on the sole of the foot; while the action of the muscles on the posterior surface, the Gastrocnemius, the Soleus, and the posterior longus digitorum, &c., tends to flex the foot upon the leg anteriorly at the ankle—that of the two former by pressing down the os calcis as a lever, and of the latter by extending and directly raising the toes.

A curious circumstance, confirmatory of the correctness of this view of the action of the muscles of this region, is mentioned by Mr. John Hunter, who suffered from a fracture of the tendon of the gastrocnemius, called the tendo Achillis. When this fracture occurred, he experienced, he says, the greatest difficulty in raising the toes from the floor, in walking across the room.

Nothing has been said of the contraction of the opposing sets of muscles which assists materially in the movements just mentioned, because that will, of course, be inferred from what

had been said above; and to avoid encumbering the subject, relating to the physiological principle here advocated, we have omitted altogether the consideration of the mechanical principles of the Lever and Pulley that are involved in all the movements of the extremities.

GENERAL ORDER IN REFERENCE TO SANITARY PRECAUTIONS.

GENERAL ORDER—NO 5.

Headquarters Department of the South,
Hilton Head, Port Royal, S. C. April 7., 1862.

1. The Major General commanding desires to call the attention of the officers and men in this department to the paramount necessity of observing rules for the preservation of health during the warm months upon which we have now entered. There is less to be apprehended from battle than from disease, the records of all campaigns in climates such as this showing many more victims to the neglect of sanitary precautions than to the skill, endurance, or courage of the enemy. With proper care exercised, and certain simple rules of hygeine observed, the hardy soldiers of the Union, inured to toil and fortified by habits of industry, temperance, and cleanliness, have nothing to fear from the climate of the department in which it is their privilege to serve. During our war with Mexico the soldiers of New England, the Northwestern and Middle States, and the adopted citizens serving in our army, suffered far less from the diseases incident to a semi-tropical climate than the soldiers from the States embraced in this department. Though not so well accustomed to excessive heat, their physical energies had been more fully developed by habits of steady industry, and their constitutions presented greater natural obstacles to the inroads of malaria. Anxious that the men of his command may be preserved in the full enjoyment of health to the service of the Union, and that only those who can leave behind them the proud epitaph of having fallen on the battle-field in defence of their country shall fail to return to their homes and avocations on the termination of this unholy rebellion, the Major-General commanding, in conformity with the excellent advice of Surgeon George E. Cooper, United States Army, Medical Director of

the Department, hereby establishes the following rules for the sanitary government of all the troops at present serving, or hereafter to serve, in Georgia, South Carolina, and Florida, and will hold all officers having the charge of camps or post, to a strict responsibility for their enforcement.

II. Care will be taken in the selection of camping grounds to avoid as much as possible the vicinity of malarious morasses or swamps: and the tents, in so far as practicable, are to be faced to the south. Each camp will be thoroughly policed twice each day, morning and evening, and all garbage or refuse matter will be collected and buried in the sinks.

III. Each tent will be screened or covered at the top and half-way down the sides with an arbor of brushwood or palm leaves, and shall be floored, whenever lumber can be procured, at an elevation of about three inches from the ground. When this cannot be done, each soldier will have a bunk raised eighteen inches from the ground on side poles, supported by forked sticks. All Quartermasters, to the extent of their ability, will furnish barrel staves to be placed across these side poles, and will issue the necessary lumber on receipt of proper requisitions.

IV. Tents will be struck at least three times each week, and every article of bedding and clothing taken out and aired, the flooring and bunks to be thoroughly cleansed before the tents are re-erected. On the days on which the tents are not struck the sides will be raised and kept raised for the purpose of ventilation; and during the nights free ventilation will be secured by having the centre seen in rear of the tent opened for the space of two feet, and kept open by the insertion of a forked stick. An officer of each company will inspect the tents of his men nightly, except during stormy weather, to see that this important provision is carried out.

V. Sinks of the proper size, screened with brushwood or palmetto branches, shall be sunk at suitable distances on different sides of each camp, and the bottoms of these will be covered each morning with a layer of sand or clay about a foot thick. It will be the duty of the camp police to see that only the sinks on the lee side of the camp are used.

VI. Fresh meat is to be issued as often as practicable, and commanding officers, while near the seacoast or any pieces of water in which fish exist, should encourage such of their men as are off duty or not otherwise employed, to fish during the cool hours of the morning and evening, not later than nine A.M. in the morning, and not earlier than six P.M. in the eve-

ning. In a scarcity of fresh meat those troops in the most exposed and unhealthy situations are to be first served—the troops stationed in the batteries on the Savannah river, for instance; and to all troops so placed a large share of vegetables, in addition to the ordinary rations, should be sent.

VII. Vegetables, fresh or prepared, must be issued frequently to all the troops, and an extra issue of coffee furnished to the men on guard during the night, just previous to their being marched to their respective stations. The Chief Commissary of Department will see that the estimates and requisitions necessary to fulfil these requirements are forwarded to the Commissary General without delay, and will report to these head-quarters any failure of brigade or regimental commissaries to make due requisition for the supplies of the troops under their charge, in conformity with the terms of this order.

VIII. Breakfast will be ready for the men as soon as they leave their tents, which must not be until after sunrise. Except when immediately in face of the enemy, or when especially ordered by the commanding officer, reveille will not be sounded until half an hour after sunrise, by which time the sun's heat will have absorbed the miasma of the night dews. All the men will be furnished with straw hats, and will be required to bathe or wash themselves thoroughly at least twice each week, and change their underclothing once a week, or oftener if practicable. The hair and beard will be kept closely trimmed; and sentry boxes of lumber or small shade arbors of brushwood will be erected at all points where sentries are permanently stationed. All soldiers on night picket or sentry duty will be provided with india rubber ponchos.

IX. The proper cooking of provisions is a matter of great importance, more especially in this climate, but has not yet received from a majority of the officers in our volunteer service that attention which is paid to it in the regular army of the United States, and by the armies of Europe. Hereafter, an officer of each company will be detailed to superintend the cooking of provisions, taking care that all food prepared for the soldiers is sufficiently cooked, and that the meats are boiled or roasted, not fried. With a little care on this point, and the advantages both to health and comfort of good cooking explained to the men, much good may be effected.

X. All soldiers on duty in districts especially malarious, or on avoidable fatigue duty during the hot hours of the day, should be given quinine in prophylactic doses, each dose combined with half a gill of whiskey, every night and morn-

ing. The certificates of regimental surgeons will be requisite to cover such issues.

Officers of the medical staff will see that the provisions of this order are complied with, and will promptly report any failure or neglect to the senior officers of the commands they are serving with, and to the medical director of this department.

By command of

Major-General D. HUNTER.

CHAS. G. HALPINE, Assistant Adjutant General.

ORIGINAL COMMUNICATIONS.

CASES IN OPHTHALMIC PRACTICE.

By E. L. HOLMES, M. D., of Chicago.

Occlusion of Pupil and Cataract.—A young man about twenty four years of age was severely burned in the face and eyes, some months since, by the premature discharge of a cannon. He was totally blind for several weeks. After the injuries had healed, four months after the accident, he came under my care. I found the cornea of the left eye so completely covered with opacities that the iris and pupil were scarcely discernible. Yet, at the upper part of the cornea, there was a small transparent portion; from the fact that the patient could perceive but little light through this part of the cornea, there was reason to suspect that the shock and inflammation had seriously injured the retina, There was really no hope that any plan of treatment for this eye could restore vision.

The other cornea, however, was perfectly transparent, with the exception of a few minute opaque spots on its outer half, produced, without doubt, by grains of powder. The iris had evidently suffered from inflammation, since it was somewhat discolored, the pupil being much contracted, irregular, and

attached to the lens, which was quite opaque. Atropine had scarcely any effect in dilating the pupil. With this eye the patient could barely see to walk with the assistance of a staff, where he was acquainted. The palpebral conjunctivæ of each eye were slightly granulated; but the sulphate of copper, applied daily in crystal, soon restored the lid to a healthy condition.

The double operation, for artificial pupil and for cataract, alone was apparently indicated. The first operation was performed by making a small incision, less than a sixth of an inch in length, into the anterior chamber through the nasal side of the sclerotic, about a sixteenth of an inch behind its union with the cornea. By means of a small-toothed forceps, introduced into the anterior chamber, a piece of the iris was torn away and excised, leaving quite a well formed pupil situated at the inner side of the iris. No inflammation followed, and in a few days the patient was able to walk out with the eye shaded. At the expiration of a month the cataract was thoroughly broken up by a needle passed through the sclerotic, and in a short time absorption had so far progressed, that the pupil became quite clear and vision much improved. In a few weeks more the patient was able, with the assistance of a cataract glass of five inch focus, to see distant objects distinctly, and read or write with a glass of two and a half inch focus.

Operation for Soft Cataract—iris and lens adherent.—F. H. a carpenter from the country, German, aged about 25 years, had suffered from cataract for more than a year. In December last he had been unable for three months to discern objects with this eye. The other eye had also become quite dull from the same condition of the lens. I found the left pupil active under the influence of light, but irregular; the lens very opaque, of a uniform milky color, and not much enlarged, as is often the case in cataracts which form rapidly. The iris was attached to the nasal side of the lens, nearly a sixth of an inch in extent. The patient had never experienced

pain in or around the eye, and was not aware that the iris had ever been inflamed. I determined to break up the cataract freely by means of a needle passed through the sclerotic. As adhesions between the iris and lens are sometimes quite readily broken, without injury to the iris, I hoped to be able to separate the cataract from the iris with the needle. Unfortunately the capsule of the lens resisted the needle more than I anticipated. In breaking up the lens the iris was put considerably upon the stretch, and, I feared, somewhat injured. The lens, however, was completely broken up and fragments projected through the pupil. The central portions of the cataract seemed reduced almost to a fluid condition. The next day the eye was somewhat congested; the pupil was contracted and the patient complained of considerable pain in the eye. As excision of a portion of the iris (iridectomy) has been shown to render the iris less liable to inflammation after injury, I at once resolved to excise a portion of this membrane and to extract the fragments of the lens. After administering chloroform, I made a straight incision about a quarter of an inch in length through the nasal side of the cornea as near as possible to the sclerotic, and as in the preceding case, removed a portion of the iris. By means of a small "scoop" the entire cataract was removed, leaving the pupil perfectly clear. The next day the pain had entirely subsided. The patient was kept in a darkened room for three weeks, when the incision had healed, and vision, even without a convex lens, was found to be remarkably good. The pupil, of course, was somewhat irregular. In three months the patient returned to the city for me to select a suitable lens. With one of three and a half inch focus, he was able to pursue his ordinary occupation.

Pannus, granulations, &c., of eight years standing.—The following case is reported simply as an example of the recuperative powers of the system in certain diseases of the eye. An Irishman, about 47 years of age, was attacked at the East, as he stated, eight years previous to consulting me,

with inflammation of the conjunctiva. In spite of all treatment he became blind. He was subsequently treated in New York and other places at the East and also in Chicago without benefit. For eight years he had been unable to do a day's work. His health had suffered seriously from want of exercise and from confinement in the house. At the time I first saw him, both corneæ were so densely covered with vessels as to conceal the pupils; the palpebral conjunctiva of the lids of each eye was not only granulated, but also atrophied; the lower cilia being very irregular, and directed against the globe. The severity and duration of the disease and the ill health of the patient rendered the prognosis as regards the eyes very unfavorable. By removing a portion of the integument immediately below the cilia of each lower lid, the trichiasis was removed. The daily application of the sulphate of copper in crystal to the inverted lids, reduced the granulations and caused absorption of the vessels and organized lymph of the cornea. Especial attention was directed to regular exercise in the open air, good diet and the use of tonics. The general health soon improved; the cornea at the end of three months became quite clear, and in less than a year had resumed its normal transparency. The iris and lens had remained in a healthy condition for eight years during all this protracted disease.

A CASE OF ECLAMPSIA.

May 3d, 1862. Was called in to see Mrs. G., in this city; aged 20; about six months advanced in first pregnancy. Generally healthy and even robust. Never has been sick, except some dysmenorrhœa accompanied with nervous disturbance during the catamenial periods. Married seven months. For some little time past, has been occasionally

attacked by slight cramping, with a choking sensation in the throat. No loss of sensation or consciousness, and the disagreeable feelings lasted but for a few minutes. Bowels slightly constipated, but no digestive derangement, save the usual morning sickness.

Ordered a saline laxative, and a mixture of Fl. Ext. Valerianæ, Sp. Ammon. Aromat. and Fl. Ext. Hyoscy.

May 4, 12 M. Sent for in haste. Patient had been in strong and general convulsions since 11 A. M. Unconsciousness; inability to swallow; skin hot and perspiring; face flushed; eyes injected; pulse 110, full and bounding; veins distended upon the temples and arms, as though varicose; respiratory movements irregular and choking; the throat stuffed with mucus; tongue and cheeks swollen, having been lacerated by the teeth during the spasms. There had been no fæcal or urinary evacuations since the day previous, but the bladder was not distended.

A powerful contraction of the uterus would commence about once in six minutes, lasting not more than five or ten seconds, and then giving way entirely, the muscles of the voluntary system would convulse in the most fearful manner.

On examination *per vaginam*, the *os* was found not dilated in the slightest degree, and rigid.

As no medicine could be swallowed, as was proved by repeated efforts, ordered a large enema, for the double purpose of clearing the intestine and acting as emollient to the irritable uterus. At the first convulsion the enema would be thrown out with great force, without any of the other intestinal contents. This was repeated several times without success.

Then sought to put the patient under the influence of Chloroform. It could not be seen that, two ounces, carefully held to the lips and nose, produced the slightest impression. Venesection to perhaps twenty-four ounces. It did not seem to mitigate either the force or frequency of the spasms. The case was so situated that there was no possibility of using the

warm bath, the effects of which in such cases I have occasionally seen beneficial.

After the bleeding, however, on recourse to the Chloroform, inhalations, there seemed a little more impressibility, but it could only be said that the paroxysms did not become more violent or frequent. Drew from the bladder about six ounces of high colored and offensive urine.

7. P. M. Dissolved a grain and a half or two grains (not weighed) of Morphine in a couple of ounces of solution of starch, and administered *per rectum*, forcing its retention with a folded napkin. Twenty minutes after the convulsive action began sensibly to diminish. At 8 o'clock, there was no convulsive action, but restlessness at periods of five or ten minutes, which, by abdominal palpation, were found to coincide with uterine contraction. Before 9 o'clock these had pretty much subsided. At 10 o'clock there were symptoms of recurring paroxysms. Repeated the enema. From this time until nine or ten of the next morning, May 5th, she was kept fully under the influence of the Morphine.

I had ordered that at any time during the night, when it was found that she could swallow, she was to take a cathartic composed of ℞ Hydrarg. Sub Chlorid gr. xij, Carb. Sodæ gr. x, Pulv. Ipecac gr. j. M. This was given at about 2 o'clock A. M. Had not operated at 11 A. M. of the 5th.

It was evident that the spasms tended to return with about equal violence as the effects of the Morphine passed off. Ordered a strong enema of Senna and Magnes. Sulph. This passed off at about 1 o'clock, P. M., with abundant evidences of mercurial influence, but with no remarkable amount of fæcal matter. Soon after this evacuation consciousness became more distinctly manifested, and she would make the usual affirmative or negative signs in reply to inquiries. *Os uteri* evidently a very little dilated, but uterine contraction not noticeable.

Ordered diuretic mixture of Acet. Potassæ, Sp. Nit. Dul. and Morph. Sulph.

8 P. M. Has rested quietly. No spasmodic action save occasional choking sensations which soon pass off. Directed mixture continued, and the injection of Morph. and Starch to be repeated in night if necessary—but patient did not require it.

May 6th, 9 A. M. Towards daylight the patient gave evidences of severe pain which the attendants supposed was premonitory of the usual convulsion. But within a very few minutes a little sharp cry astonished both mother and attendants. A six months child barely announced its indignation at its untimely entrance to the world—drew a few idle breaths irregularly and imperfectly, and then gave up its tiny ghost —a couple of hours before my arrival. The placenta had not been thrown off, although the pains were quite severe. It was however readily removed, and several firm clots above it, which seemed to produce much uterine grief.

The after pains continuing quite severe, and wandering suspiciously to other parts of the body, ordered an anodyne and took my leave.

8 P. M. Patient has been tolerably quiet, has taken a little toast water and tea. Troubled with occasional choking sensations, only relieved by sitting up in the bed, a position of course contrary to instructions; occasionally, slight general cramping. Pulse getting a little too hard; skin a little too dry; tongue heavily coated; breath fœtid; and urine scanty, thick and offensive. Repeat mercurial cathartic, and secure its operation in the morning with Liq. Potassæ Citrat.

May 7th, 12 M. Cathartic has operated finely. Lochia free, but not profuse. Milk appearing in the breasts. Has a little appetite, and generally about as well as patients after an ordinary labor.

From this time until the 12th she had no marked symptoms save persistence of the choking sensations, for which I prescribed the usual antispasmodics. It turned out, however, that none were taken. Upon the twelfth, her bowels being constipated; tongue heavily coated; urine scanty, thick and

dark; with some febrile excitement and nervous disturbance, ordered a cathartic: ℞ Hydrarg. Sub Chlorid. gr. vj, Pulv. Rhei gr. v, Pulv. Ipecac gr. ss. M. To be taken at bed time. Seidlitz Powder in morning, if necessary.

May 5th. Cathartic had relieved general symptoms, but she still complains of the choking sensation in the throat as troubling her very much. Ordered pills containing each a gr. of Valerianate of Zinc, ¼ gr. Ext. Belladonnæ and three gr. Ext. Gentian. One to be taken three times a day. Not forgetting a generous diet and fresh air. The case has presented no more trouble worthy of note.

Bleeding in this case was only of indirect advantage—possibly favoring the action of subsequent agencies. In consequence of displacement of the bandages by the struggles of the patient during my absence, the loss of blood was considerably more than intended. The Chloroform proved inefficient, although the article was a good one and carefully and lavishly exhibited. Morphia finally controlled the convulsive action. The mercurial first showed that the seat of the difficulty was reached, but too late to prevent the premature expulsion of the fœtus. The latter was not to be regretted, for the strong probability is that the mother would have been obliged to run the gauntlet of each recurring monthly period, with all the incident hazard. A.

Chicago, May 22d, 1862.

EDITORIAL.

The Sanitary Commission.—An eastern contemporary seems to think, as we used to before we had "farther light," that the Government officials of the medical department have done their duty in furnishing medicine and hospital supplies. It may be so at the East, where millions upon millions have been lavished upon political favorites in contracts of every conceivable sort, including straw hats, linen pantaloons, herring, etc., etc.; but "out West" it has been different. The Government officials entrustsd with this matter have been derelict to the last extreme. Hundreds of lives would have been lost, and thousands would have experienced all the horrors of inattention, neglect, and we might almost say of starvation, if it had not been for the well directed efforts of the western agents of this benevolent association.

Whilst it would seem almost invidious to particularize, we cannot forbear especially mentioning the name of the Hon. Mark Skinner, Chairman of the Chicago Sanitary Commission, a distinguished citizen, and, we are proud to say, a leading Trustee of Rush Med. College, as peculiarly worthy of honor for the efforts which he has put forth and the success which has attended them.

Occasionally there is no doubt these supplies have been misappropriated or even wasted, of which certain startling evidences have been reported, but nevertheless the bulk, forming an enormous aggregate, has reached its destination and filled a *hiatus*, previously *valde deflendus*.

Surgeon J. B. Porter.—The newspaper readers must have noticed certain grave charges against Surgeon Porter, U. S. A.,

in charge of the General Hospital at Alexandria. Correspondents of the N. Y. *Tribune*, and other sensation newspapers, alleged brutality of treatment, and neglect of his patients. A Court of Inquiry was promptly convened, and the matter thoroughly investigated. Surgeon Porter, with conscious pride of integrity, scorned to introduce a single witness. His accusers were convicted out of their own mouths, and had the mortification of having Surgeon Porter, not only triumphantly acquitted, but expressly complimented in strong terms by the Court.

The only charge partially sustained had reference to a temporary bad quality of the bread supplied—a thing proven to have been no fault of his. We compliment this honorable, high-minded, and distinguished officer on his complete vindication.

Foreign Correspondence.—Dr. Edward L. Holmes, of this city, now visiting Europe for the further cultivation of the specialties to which he has largely devoted his attention, promises us a series of letters during his absence, which will appear from time to time in the JOURNAL.

Dr. Holmes having some years since spent considerable time in the prosecution of his favorite branches of professional study in the Continental hospitals, having already a large personal acquaintance, and being familiar with the German and French languages, will have peculiar facilities in his present visit, which we hope to share with our readers in results.

In his absence we venture to write, what we should not dare to write were he here, that upon excellent native abilities, cultivated by liberal education, he has engrafted large general professional attainment, with an exceedingly minute and comprehensive familiarity with diseases of the Eye and Ear.

Earnestly opposed as we are to specialism in practice, we cannot object to it where, as in the case of Dr. Holmes, it is not exclusive but based upon general professional acquirement.

Camp Diarrhœa.—One of our professional friends recently visited the army of the Union in a volunteer capacity. He found an Illinois regiment deprived of one of its surgeons by death and of the other by disease. It had no medicines or hospital supplies of any sort whatever. It had *three hundred and forty-nine* on its sick list. The prevalent disorder was diarrhœa. Undaunted by the difficulties before him, he went into the forest, gathered white oak bark, the root of the wild black berry, and managing to get some Capsicum and Carbonate of Ammonia, almost surreptitiously, he made a decoction of the first three and added the last. With "only this and nothing more" the sick list was reduced in a single week to *eighty.*

General Grant, who was suffering from the same difficulty, was relieved at once by the same remedy. The hint may be worth something to the medical attendants of the grand army. We call upon the Dr. to "relate his experience," over his own signature. The facts have been given us from a most reliable authority.

A System of Surgery; Pathological, Diagnostic, Therapeutic, and Operative, by Samuel D. Gross, M. D., Professor of Surgery in the Jefferson Medical College of Philadelphia, etc. Illustrated by twelve hundred and twenty-seven Engravings. Second Edition. Much enlarged and carefully revised. In two volumes. Blanchard & Lea. 1862.

We are gratified to be able to announce a new edition of this Cyclopædia of Surgery. Considering the large size of the work and its expensiveness, the extremely rapid sale and its exhaustion of an entire edition, not only proves the value of the work, but speaks well for the intelligence of American surgeons. The Second Edition bears evidence of careful revision, on nearly every page; and the whole sections of new matter prove with what care and pains-taking the distinguished author has labored to render his work worthy of the patronage of the profession. We cannot enter into even a specification of the additions which have been made, but will simply add that the work is still the most complete exponent of the science and art of surgery in our language.

We borrow from a contemporary the above brief notice of what we are certain must be a work meriting fully the encomium contained.

The Editors were notified of the forwarding of the work to this JOURNAL. Even the errand boy, who thinks he delivered it, has appeared on the stage, but the volumes we can lament for, as Rachel for her children, because "they are not."

The books were delivered, but not to the Editors or their representatives. "There is a bird i' the air" which whispers, (if it be a bird, and a bird ever whispers,) *who* is enriched by their surreptitious possession. He needs them, yet remember, Friend, *multitudo librorum sæpe est nubes testium ignorantiæ possessoris*—and you need no witnesses of that transparent fact in your case. You may eat the volumes, an' yon wish, but we fervently trust that they may prove as bitter in the belly of your conscience (if you have a conscience), as did the little book masticated in the Apocalypse. If you have a Bible, Friend, look up the allusion—a little Bible at all events will be (and long before this would have been) excellent in your case. Finally, may ascarides tease you, and calculus "gravel" you, and dyspepsia plague you, and scabies stick to you, until you send back those books. We will reward you for this virtue *in extremis*, with a bottle of cocoaine warranted pure, and "no questions asked."

The Principles and Practice of Obstetrics. By Gunning S. Bedford, A. M., M. D., Professor, &c., &c. Second Edition. Carefully revised. New York: William Wood, 389 Broadway. 1862. 8*vo.*, *pp.* 763.

This book has had a marvelous success, and yet we need scarcely say, not beyond its deserts. Not only is the first edition already exhausted, but it has enjoyed the rare distinction of having been translated and published in several foreign countries, where it has been received with high and almost universal commendation.

It takes rank at once as a standard work and authority in the department which it represents.

It is thoroughly readable as well as scientific—the author recognizes the fact, of which too many are oblivious, that *stilts* are not necessary to an impressive style. It is systematic, without being cramped or rigid. It is comprehensive, without being tedious. It is learned and exact, without being pedantic and finical. In his general views the author is judicious, sound and, what we especially delight to see, conservative. He knows how to acknowledge the general truth that a "meddlesome midwifery is bad," and yet with perfect consistency to direct at suitable times prompt and even heroic interference. The sentences on the abuse of embryotomy we commend especially to the earnest consideration of all junior (and a good many senior) practitioners. This latter feature of his work we rejoice to see especially commended by foreign reviewers.

Prof. Bedford evinces, it is not out of place to observe, throughout his volume, an appreciation of the true feminine character, and the relation of the accoucheur to his suffering patient, every way indicative of that delicacy and refinement which should distinguish the professional gentleman.

We predict that the vast labor, extensive research, enthusiasm and ability which Brof. Bedford has lavished upon this book, will carry it through, not only this, the second, but many subsequent editions.

Chicory in Coffee.—M. Lawey, referring to the great efficacy of good coffee as a substitute for brandy in soldier's rations, its less fugacious qualities as a stimulant, its probable prophylactic energy against malaria, its powers for counteracting the physiological effects of heat, and tendency to restrain alvine fluxes, calls attention to the fact that chicory, with which it is commonly largely adulterated, has none of these qualities, and that being laxative, it favors the occurrence of diarrhœa and dysentery. The point seems worthy of in-

vestigation, so that when soldiers by a somewhat questionable philanthropic or finical policy, are supplied with coffee instead of spirit rations, they may not be cheated of this even, and then poisoned by chicory or other knavish substitution.

Secale Cornutum in Delirium Tremens.—Several cases of recovery after the use of Ergot in Delirium Tremens have been recently reported. A writer in the *Am. Med. Monthly*, who says, however, that he has employed it in but one case, admits having been impressed by the apparent power of the remedy. Ice-water baths, Digitalis, Morphia in large doses, Alcohol ditto, and indeed a half score of other agents have each their advocates among late writers. But Delirium Tremens is cured by no drug. It is only met by restoring depraved or lost nutrition.

Fucus Vesiculosus as a Remedy for Obesity.—M. Duchesne Duparc strongly recommends this plant as a means of diminishing an uncomfortable tendency to obesity. He reports three cases in which its use was attended by a decided diminution in weight, without any other appreciable effect. In one case, the loss was from twelve to fifteen pounds in about two months; in another, the diminution in weight was thirty pounds in three months; and a third, there was a decided relief from the discomfort under which the patient had long labored, but the record is incomplete. The remedy is best administered in the form of alcoholic extract, of which there may be taken as much as three or four grammes daily. Great care should be used in the collection of the fucus, as it is easily confounded with other marine plants, which are entirely inert, so far as the peculiar efficacy of the vesiculosus is concerned.—*Boston Med. Jour.*

Tetanus successfully treated by Chloride of Barium.—The *Gazette des Hopitaux* reprints from the *Italian Medical Gazette* the details of a case of tetanus, in which the chloride of barium was successfully administered. It was prescribed in the proportion of sixteen grains to a pint of distilled water, the whole to be taken in the course of twenty-four hours. At the end of the eleventh day the symptoms had nearly ceased,

and the dose was reduced to eight grains a day; on the sixteenth day the medicine was discontinued, and the patient left the hospital, well, on the eighteenth day. Several other cases of tetanus are referred to, in which this remedy has been employed with success in Italy, during the past two years.—*Boston Med. Jour.*

Poisoning by Strychnia.—Dr. Julian Harman reports, in the *Boston Journal*, May 1st, a case of poisoning by strychnia. Something like thirteen grs. of pure crystalized strychnia were taken in all. It was taken in two portions after dinner. Severe spasms ensued, which were quieted by Chloroform. An emetic was administered, and after its action the Chloroform was renewed. "At 7 o'clock, I gave six grains of Iodide of Potassium, with four drops of Tincture of Iodine; at 9, gave five grs. of Calomel, with one-third of a grain of the Sulphate of Morphia, followed by Salts and Senna in the morning. During the night there was great muscular soreness, burning heat of the stomach and bowels, and vomiting of ropy fluid, which gradually abated, till in a few days the patient was well."

The Doctor observes that the mingling of the poison with the food prevented rapid absorption, and that a portion of it was probably ejected by vomiting. The Iod. Pot. had probably little effect in neutralizing the poison, "but the Camphor and Chloroform were probably far more effective than would have been the freest use of the best old Bourbon!"

It will be recollected that previous to the execution of Gordon, the slave captain, it was said that he had attempted his own life with Strychnia, which, whether true or false, was made the excuse for intoxicating him with Whiskey to the hanging point.

Bromide of Potassium in Epilepsy.—Several cases have been recently reported of successful treatment of Epilepsy by Bromide of Potassium. The usual dose is about three grains three times a day. It will probably be found to have about

the average success of other empirical remedies for this variable and often intractable affection. It is suggested as particularly useful in cases connected with, or dependent upon, disorder of the sexual apparatus. The Bromide seems antaphrodisiac.

Essays.—Dr. John P. Spooner, of Dorchester, Mass., is publishing a series of papers in the *Boston Journal*, on "The Different Modes of Treating Disease." We trust that he will combine them and issue in a more permanent form. A good book on this subject at the present time is a desideratum.

Podophyllum Peltatum.—This vegetable threatens to displace a variety of hobbies just now. European writers have taken it up, and some of them have grown enthusiastic. The idea is advanced that it is about the only reliable chologogue in existence. It is asserted to be antisyphilitic beyond Mercury and Iodine. That it will promote or restrain discharges according as the indications are for one or the other, &c., &c.

We congratulate our hobby-riding friends on the cheapness and abundance of the new panacea. In this respect it is far ahead of Verat. Virid. and Chlorate of Potash. Having used it often within the last sixteen years, we are free to say, that it is the best indigenous substitute for Jalap of any substance with which we are acquainted. Its fresh root will prove actively emetic as well as cathartic—when dried it seems to lose emetic power. As an alterative it will rank with Sarsaparilla.

Surgeon General of the U. S. A.—The medical profession of the country are honored in the selection of Prof. Wm. A. Hammond, of the University of Maryland, as the new head of the Medical Department of the Army. He is well known as the author of numerous and valuable contributions to our periodical medical literature, and as occupying a front rank among experimental physiologists.

We believe he was formerly, for some ten or twelve years, an assistant surgeon in the regular army, resigning the position two or three years since. His executive qualities are said to be of a very high order, and his patriotism has been proved unimpeachable. In his present position he has an opportunity for exercise of high faculties of mind and practical knowledge, unequalled since the meridional days of Baron Lawcy.

Chopart's Operation.—Douglass Bly, M. D., reports to the N. Y. Medical Society: "The operation known as Chopart's, severs the flexors of the foot, and should *never* be performed under any circumstances whatever. The moment the flexors are severed, the extensors, having no antagonists, extend the foot on the leg, and cause the amputated surface to point almost directly downward. This deprives the patient of all power to use the remaining portion of the foot, and also renders him incapable of wearing a useful substitute. I am aware that, to obviate this difficulty, some surgeons have severed the tendo-achillis, but that has proved ineffectual, and it is only a partial relief at best. Therefore, amputation at this point renders the patient a hopeless cripple. The wound is slow to heal, *always tender*, often ulcerating, and the remaining portion of the foot is generally a curse to the patient as long as he lives, unless he submits to a secondary amputation."

Treatment of Whitlow.—All the asserted abortive methods of treatment are almost always useless. Those which can be relied on are the local antiphlogistics and cataplasms of mercurial ointment. They will at least moderate and limit the suppuration. The only really abortive treatment which can arrest the progress of the disease, is by early incisions, made where the pain is most severe, extended through the length of the inflamed part and deep in proportion to the gravity of the disease. When suppuration has commenced, incisions are indispensable. The bistoury is plunged down to the pus, to the tendinous sheaths or the periosteum, if they are implicated,

and the tumor divided in its whole length. If the pain returns, it must be followed up with the bistoury, wherever it appears. After the incision, the hand should be kept for some time in warm water, or a poultice be applied ; the wound is afterward dressed with lint and cerate. Constitutional symptoms should be treated by diet and emollient drinks. Emetics and purgatives are indicated by symptoms of gastric or intestinal disturbance, and would also be useful as revulsives. Complications and sequelæ must be treated by appropriate measures.—*Dr. Laurel.*

Tannin as Substitute for Peruvian Bark.—M. Leriche in a recent memoir, awarded a prize by the Society of Medical Sciences of Brussels, revives the use of Tannin as an antiperiodic, but says it must be given in larger doses than formerly. Whatever the type of the periodic fever he recommends that the Tannin should be given in from twenty to thirty grain doses before the paroxysm. Two or three doses are usually sufficient to effect a cure. If the fever should not yield, fifteen grains only should be given in a mixture to be taken a table spoonful every hour. He has never seen the remedy fail in its effects. He has administered Tannin in 144 cases, ten of which were still under treatment at the time of publishing his memoir. 134 had been entirely cured, and two of these were men who had recently returned from Algiers with the African fever.

This treatment reminds of the gelatine cure of old time—but the question arises—when do the bowels get open ?

Cubebs in Simple Urethritis of Women.—M. Trousseau remarking upon the frequency of simple urethritis both in young girls and married women, " characterized by a frequen desire to make water, with severe smarting during micturition, and vesical tenesmus lasting some minutes afterwards," commends freshly powdered cubebs as remarkably efficient. He advises from half a dram to a dram, twice a day at meals. " It should be continued several days, and as long as the

symptoms last; when improvement begins the cubebs are given only once a day for a week, and in the following week, if improvement continues, the cubebs are given only once every second day."

Many cases of this kind, and even of gonorrhœal urethritis, where the cubebs fails to relieve, or disagrees with the patient, will be speedily ameliorated by moderate doses of *Abietis balsameæ*, which may be rendered not unpalatable by solution of Glycerine, or Mucilage and Sugar with Sp. Lavand. Comp. Where balsamic remedies are indicated, this particular one will be found very efficient, and less liable to produce gastric derangement, headache, &c., than those in more frequent use.

Epidemic Influenza.—In an epidemic influenza, characterized by profuse secretion of mucus and spasmodic coughing, sometimes simulating whooping cough, Dr. H. Bradford, of Nebraska, found the following mixture, especially beneficial: ℞ Syrup. Prun. Virgin. ʒ IV: Vin. Ipecac., Vin. Antim. aa ʒ ss; Tinct. Cannab. Indic ʒ j; Acid, Gallic, ʒ ss. M. A tea-spoonful every three or four hours.

Causes af Tuberculosis.—Dr. Woody, in a recent paper writes sensibly as follows:

"I would place at the head of the *causes* of consumption those influences in our lives that inevitably produce effeminacy: such as naturally result from the fashionable mode of living. The nervous exhaustion that follows in the train of indolence, the use of warm relaxing drinks such as coffee, tea, etc., the use of tobacco and other narcotics, that make heavy draughts on the brain, the sleeping on feather beds in close seven-by-nine rooms, and sexual excesses, constitute, I think, nine-tenths of the exciting causes of this disease."

Dr. W. thinks that in the young, of both sexes, masturbation is a predisposing and exciting cause that exceeds all others put together. Our own opinion, formed after many years careful observation, is that the number addicted to this disgusting

vice is vastly over-estimated, and its alleged disastrous effects *hugely* exaggerated. The advertising columns of the newspapers afford ample evidence of the spoils which accrue to the nostrum venders, "Howard Associations," *et id genus omne*, from promulgation of such gross notions upon this subject. That occasional instances of fearful effect from this vice do occur is undeniable, but nothing in comparison to the swepeing statements so often made in the premises. It is safe to say that half of the cases of spermatorrhœa, &c., charged so often upon a long discontinued and repented vice, in fact depend upon dyspepsia, or upon the wrong habits of living to which Dr. W. has alluded in the above quotation.

We have in mind the case of a gentleman who came to us with a trifling *Herpes preputialis* which, with deep contrition, he confessed as the probable result of an illicit *coitus* five years previous, although it had only appeared two days before. Everybody knows such cases are the invariable dupes of the advertising knaves who "bleed" without letting of blood, and "cure without mercury." Add now, to cases of this sort, those who long since recollect to have rarely indulged in solitary vice, and let the terrible catalogue of resulting ills be instilled into their minds by such broad assevertions as that above, and the resulting moral, mental, and physical injury can scarcely be measured.

Injections for Gonorrhœa.—Dr. Bumstead, in his valuable treatise on venereal diseases, recommends (p. 57) that previous to injections for gonorrhœa, micturition should be performed, to clear the urethra of matter and to empty the bladder, so that the virus may not be carried before the injected fluid into the deeper parts of the passage, and that there may be no necessity of again evacuating the urine before the medicated fluid has had its full influence, and the temporarily augmented sensibility has abated. He suggests that it is better that quarter of an hour should elapse subsequent to passing the water, before use of the injection. In

our opinion not more than five minutes should be allowed, for in ten or fifteen minutes, in very many cases at all events, the discharge will be found free on the urethral surface, and will tend first to neutralize the medicament, and, again, to be carried into the deeper parts.

This is another of the "little things," but may often determine the speedy cure or obstinate continuance of the disease.

Bicarbonate of Potassæ in Croup.—The *Druggist's Circular* states: Since Dr. Luscinsky, of Vienna, has recommended the bicarb. of soda, Dr. Kellogg has succeeded in establishing the claims of the bicarbonate of potassa, used by himself and others for a long time with decided success. After giving an emetic, he prescribes: ℞ Bicarb. Potassæ ʒ ss; Aq. Fœniculi ℥ v; Syrup. Senegæ ℥ j. M. A teaspoonful every half hour. In very severe cases he augments the dose to a grain and a half of the salt every quarter or half hour, and sometimes repeats the emetic." This treatment has at least the recommendation that it is a prophylactic against the injurious heroic methods sometimes adopted.

Bebeerine in Menorrhagia.—The *Reporter* recommends: "℞ Sulphate of Bebeerine gr. xij; Pulv. Cinnamon gr. xviij; Pulv. Ferri gr. vj. M. Divide in twelve parts. One to be taken every other day during the interval between the menstrual terms. During the flow, especially if it be profuse, the remedy should be given oftener and in larger doses."

We can readily believe the latter statement—a grain of Sulph. Bebeerine, with a grain and a half of Cinnamon and a grain of powdered Iron once in two days would hardly seem competent to control a particularly severe case of menorrhagia. The formula is commended to brethren with homœopathic tendencies as little liable to do harm, even though it does no good. Multiply the frequency of administration by six, at least, and it may prove beneficial in some cases.

Invagination of the Intestine.—In a late discussion in the Royal Med. and Chirurg. Soc., Dr. Stewart remarked that he had long since given up the use of purgatives in suspected cases of invagination of the intestines. He is now in the habit of using three or four grains of Extract of Belladonna in a large quantity of water by injection. In one case by mistake this injection was repeated but the poisonous effects were not developed. He had only seen two cases of delirium out of twelve thus treated. He had found the method usually successful.

Dr. S. observed that he resorted to the same plan in cases of poisoning by lead, in which colic and constipation were prominent symptoms.

This is vastly better than the old plan, but sometimes the Belladonna will prove unmanageable and it is variable in its strength. Laudanum or Morphine in large doses by injection we have seen frequently successful even in apparently desperate cases. Meanwhile let it be observed.

Aneurism of the Extremities Treated by Flexion of the Limb. This subject has recently been attracting considerable attention. Several successful cases are reported in the *London Lancet* and other journals. They were for the most part popliteal. The principle upon which the treatment is based is simple. Strong flexion of the limb considerably retards the blood in the main artery, and nearly arrests the pulse. The object in treating aneurism is not to altogether arrest the circulation in it, but to produce such a degree of retardation as will permit the formation of concentric fibrous laminæ on its interior. Absolute arrest of the blood is uncertain, and somewhat dangerous, in result. Retardation is safe and the effect permanent. Cures from flexion of the limb, even in popliteal aneurism, had been secured in six days, although, as a matter of precaution, semi-flexion is advised for several days subsequently. No instruments are needed, a bandage being the only requisite. Attendants are dispensed with, and,

aside from the fatigue of the position, there is little to annoy or distress the patient. Pressure may sometimes be conjoined with advantage. The subject is called to the attention of the profession by Earnest Hart, Esq., Surgeon to the West London Hospital, whose first paper on the topic appeared in 1859. It is a method of rare interest both for its success and simplicity, and the sound physiological ideas upon which it is based.

Ligation of the Funis. That very sagacious obstetrician, Blundell, frequently deprecates the sarcasm: *Parva leves animos capiunt*, as applied to the little things necessary to be known and attended to by the practical accoucheur. Among these little things, our attention is directed to one in particular, by a passage on page 368 of Prof. Bedford's second edition of his valuable treatise on the Prin. and Prac. of Obstetrics. He proposes but one ligature, and says that he perceives no solid reason for two. He very properly observes, that the argument usually advanced in its favor—the liability of the mother to the hazards of flooding through the untied extremity of the cord—is founded on a false hypothesis, as he had previously pointed out when describing the anatomical arrangement of the placenta, and the fœtal circulation.

He remarks that:

"1. Two are unnecessary, because the small quantity of blood, which flows from the united extremity of the cord, consists merely of the disgorgement of the vessels on the fœtal surface of the afterbirth, and does not come directly from the system of the mother. 2. This very disgorgement, in my opinion, assists in the more prompt expulsion of the placenta."

We admit the fallacy, to a certain extent, of the reason for two ligatures which he adverts to, nevertheless we think that there are valid and important reasons for two ligatures.

1. Two ligatures are more cleanly. The untied extremity of the cord almost invariably distributes considerable blood, which, wherever it comes from, makes as disagreeable a "*muss*" of the surroundings as though it came from the

uterine sinuses direct. This is almost entirely obviated by the use of two ligatures instead of one.

2. The retention of the blood in the placenta by the second ligature maintains its bulk to such an extent that the tendency to inertia of the uterus, the principal cause of delay in expulsion of the afterbirth, is very materially lessened. By this means uterine contraction is favored, speedy expulsion of the placenta, membranes and coagula is secured, and hæmorhage prevented, not solely from the vessels of the fœtal surface of the placenta, but from the otherwise inert and uncontracted uterus.

3. The distended placenta is the natural stimulus of the uterine contraction which thrusts it out from the cavity, and by securing its full distension by two ligatures of the funis, it will rarely ever be found necessary either to introduce the hand, or even finger, to excite, direct or reflex movements of the uterine muscle.

In the earlier years of the writer's practice, he employed but one ligature, and, as a result, often had to resort to the usual mechanical and medicinal measures for removing the "retained" placenta. But since adopting invariably the two ligatures, the instances where the placenta remains unexpelled, more than a few minutes, have been few and far between.

It may be remarked that the crushing of the vessels of the cord by the lower animals in biting off the funis, not only prevent bleeding from the young animal, but secures also the effect of the second ligature so far as the placenta is concerned. Its mass still remains so great that it is thrown off by the spontaneous action of the uterine muscles, without any necessity for either ergot or titillation of the internal surface of the cervix uteri by the finger.

We repeat this may be considered a little thing, but it is vastly more important, practically, than the treatment of *inversio uteri* or "hour-glass contraction." For these two the practitioner may spend a life of active practice without seeing

—whereas the other is to be attended to in every case of obstetrics.

Camp Diarrhœa.—The Army of the Union is suffering from the scourge of camps—diarrhœa, which, however, is troublesome by its disabling the men from duty, rather than from resulting mortality. There is no doubt that nineteen out of twenty cases might be prevented by attention to the plainest hygienic precepts.

It is presumed that the Southern Army are similarly afflicted, for an extract from a Memphis paper recently appeared among the daily telegraphic dispatches, setting forth that "Gen. Beauregard's effective force is essentially weakened by diseases peculiar to Mississippi bottoms." It is believed they are evacuating.

Autumnal Diarrhœa, &c.—Dr. Hines of Nottingham recommends, in the *London Lancet*, an old treatment: ℞ Ingus. Gent. comp. ʒ viij.; Tinct. Opi. ʒ iss.; Acid. Nitric gtt. XX. M. An ounce after every liquid stool or painful alvine evacuation. He uses at the same time sparing draughts of ice-cold mint tea.

ANNUAL MEETING OF STATE MEDICAL SOCIETY.

Whereas the President, one Vice President, and the Chairman of most of the Standing Committees, together with a very large proportion of the members of the Illinois State Medical Society, are on active duty as Surgeons and assistant Surgeons with different divisions of the Army entirely beyond the limits of the State; and, whereas, many more are now, and will be for several weeks to come, engaged as volunteer Surgeons to aid in taking care of those wounded in the recent severe battles in Tennessee, therefore we, the undersigned, give notice that the Regular Annual Meeting of the State Society will be *postponed* until the first Tuesday in May, 1863.

HENRY GOULD.
NATH'L ENGLISH.
ANDREW MCFARLAND.
Committee of Arrangements.

N. S. DAVIS, Permanent Sec'y.

Clinical Lectures on the Diseases of Women and Children. By Gunning S. Bedford, A. M., M. D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; author of "The Principles and Practice of Obstetrics." Medicus curat morbos, natura sanat. Hippocrates. Seventh Edition. Carefully revised. New York: William Wood, 389 Broadway. 1862. From the Author.

This work is too well known and widely esteemed to render it necessary for us to do more than barely announce another edition.

The great variety of cases brought under review, give the work almost the characteristics of a systematic treatise, which it excels in interest by the life-like delineations that the clinical lecture gives opportunity to present.

The style which some reviewers have criticised, as rather too "free and easy" for a scientific work, has the advantage of interesting and sustaining attention, whilst the portraiture of diseases is so clear and distinct that he who runs may read.

Dr. Bedford never is obscure, his ideas are always transparent, and although here and there practitioners will differ as to his reasoning and methods, they will always know exactly what they differ from, so that there will be no occasion for *bush-fighting* in the matter.

We heartily commend the book to those of our readers who are not already possessed of it.

Constitution, By-Laws and Code of Ethics of the Will County (Ill.) Medical Society. From Dr. G. S. Thomas, President of the Society.

The objects of this association are well set forth in the preamble to the constitution:

"Inasmuch as an institution so conducted as to give frequent, united and emphatic expression to the views and aims of the medical profession in this county, must at all times have a beneficial influence, and supply more efficient means than have hitherto been available here for cultivating and ad-

vancing medical knowledge, for elevating the standard of medical education, for promoting the usefulness, honor and interest of the medical profession; for enlightening and directing public opinion in regard to the duties, responsibilities and requirements of medical men, for exciting and encouraging emulation and concert of action in the profession, and for facilitating and fostering friendly intercourse between those who are engaged in it, therefore be it *Resolved*, in behalf of the Medical Society of the County of Will, that for the organization and management of the same they adopt the following Regulations."

The Society is organized as auxiliary to the State Medical Society, and adopts the code of ethics adopted by that Society, at Springfield, June, 1850, any important violation of which is to be deemed sufficient reason of charge and expulsion. One very important By-Law of the Society we quote as suggestive:

"Sec. 8. Each member of this Society shall keep a record of all important cases that may occur in his practice, and such other facts as may fall under his observation, of especial interest to the profession, and report them to this Society and medical journals for publication."

We congratulate the Society on both its present condition and prospects.

Hygiene of the Sewing Machine. An advertisement of the widely known and justly celebrated sewing machine of Messrs. Wheeler & Wilson appears in the present number of the JOURNAL, and we deem the occasion a fitting one in which to notice certain matters of hygienic importance strikingly connected therewith.

Since the fall of Adam, and the stitching of the primeval garment, a certain and gradually increasing amount of sewing has been required. Of one-half the race it has constituted the principal occupation, and unable to accomplish all demanded, a certain portion of the other half has been called upon to take part in the toil. Hence—tailors and man-milliners.

It is safe to say, that sewing has occupied more of human attention than any other branch of industry. Hood's "Song of the Shirt," wept over by so many, and which has stirred so many philanthropic souls to their very depths—touched but upon the very margin of the matter, the uttermost skirt of its garment—for more than half of the world was "stitch, stitch, stitching," with what of detriment to mind, body and soul it is worth while to think.

The tailor, who is but a temporarily hired Hessian in the great warfare against nakedness, is, by a melancholy adage, "the ninth part of a man"—what shall we say of woman, who, by the inevitable fiat of society, has been from time immemorial reduced to perpetual servitude to the needle?

The present writer thinks, for instance, that the so gravely mooted question of the psychological equality of the sexes can never be decided *pro* or *con* until the women receive their "freedom papers" from this needle-thraldom. There are some three or four millions of colored people on this continent who are obliged to have other people take the trouble to provide for their continuance in existence, and much concern does it give to very many people of humanitarian tendencies, and very much distraction to many other people not altogether humanitarians, but perhaps otherwise.

The needle has some hundreds of millions of slaves even now, although Wheeler & Wilson and some others have put into material shape an edict of emancipation which ought to have caused their crowning with laurels more worthily won than those of Clarkson, Wilberforce or John Brown.

The sewing machine is an organized protest against a slavery more intolerable than that of the Genius to Aladdin's lamp. It accomplishes more for the elevation of the feminine portion of the race, (and mediately of the other half) than did all the chivalry of the middle ages with its troops of gallant knights and squires.

But our space will not permit further allusion to its politico-economical, social or poetical, religious or psychological

relations, we purposed to refer simply to its hygienic influences.

In an article read by A. K. Gardiner, M. D., Professor of Clinical Midwifery, and Diseases of Females, in the N. Y. Med. College, before the N. Y. Academy of Medicine. He asserts broadly, and proves by carefully collated statistical facts, that during an experience of ten years, the health of operators upon sewing machines of all varieties, was in no respect impaired by working upon them. In the factories, where many of the machines were used, not a single case could be found where injurious results could be traced to constant working upon the machines, although some of the girls "worked upon them for a year without losing a single day."

Contrast this with the results of constant, or even occasional use of the old fashioned hand needle, as observed in any neighborhood, even in the country. The dyspepsias, constipation, neuralgia, uterine affections, coughs, emaciation—phthisis!

We extract a couple of paragraphs from Prof. Gardiner's paper:

"The principal diseases said to be caused by the sewing machine are the so-called "female diseases" and spinal complaints. I have had some practice in these diseases, and may be allowed as a matter of personal experience to state that I have never seen a single patient who gained her living by working a sewing machine, who was affected by leucorrhœa, "falling of the womb," "ulcerations of the womb," or spinal difficulty—who ever had an abortion while using it, or who in any way could trace any injury from it. Neither have I had any patients in private practice with any diseases at all attributable to it. I have had many patients who have made up their family and children's clothing for the season, and their "baby linen" just before their lying in, with no injurious effects.

I am aware that the jar of the machine, and the "up and down" vibratory motion are stated to produce abortions, but this seems to be a most erroneous opinion, inasmuch as the "jar" of the machine, if there is any, falls not upon the feet or lower extremities, in which it is not felt in the slightest degree, but entirely upon the arms of the operator, resting upon

the table; and from this undeniable reason, the alleged analogy between the hypothetical statement, that "the vitality of hen's eggs carried in cars, and subject to their vibratory and oscilating movement, is so destroyed that not one in a score will hatch," does not hold good, even if it can be proved that the human ovum in a healthy uterus is killed by this trembling movement, as is claimed by some. Upon this point, I have also a word to say in a proper place. Overwork, and by one unaccustomed or disused to the sewing machine, may, very probably, in some cases produce an abortion, and so will a long walk in the Central Park, a day's shopping, excessive laughing, even the eating of a bunch of grapes; yet shall these be denied the parturient woman? Shall we take the exception for the rule?"

Another objection which has been urged, is that the sewing machine injures the eyes of the operator. This has been fully negatived by the opinions based on large experience of distinguished oculists, among whom may be mentioned Dr. Geo. A. Bethune, of the Mass. Eye and Ear Infirmary, and Dr. Isaac Hays of Philadelphia, Drs. Wilkes, Clark, Ceccarini, and Stephenson of New York City, and Dr. Clark of Newark.

The "glass foot" which Messrs. W. & W. have added to their machine, does away entirely even with the theoretic objections upon this point.

The conclusion of Prof. Gardiner's paper is worthy of the careful consideration of every practitioner:

"A body in vigorous health is less liable to be seized with, or prostrated by, disease than a body in an atonic condition. If this is true of the whole frame, it is true of a portion of it, or of a single organ. The sewing machine overworks, that is wearies and fatigues, the learner, who exerts a muscular force, and for a too prolonged period, sufficient to drive half a dozen machines. The same instrument is but a healthy stimulant to the muscles of the lower extremities, of those accustomed to its use, developing and strengthening them. But the benefit and increased volume of the muscles actually employed is extended to the adjacent parts of the frame, and the muscles which belong to the pelvis, the back, and which support the abdominal walls, are called upon to aid in the work by steadying the frame, and firmly holding the parts to which the mus-

cles of the lower extremity are attached. The developement of these muscles affects all the adjacent organs. The circulations are carried on more regularly, the absorbents are brought to work more energetically, and there is a tonicity very perceptible throughout the abdominal parietes, which is a result of the employment of the neighboring organs. In the female we have as a direct result, a "tone" in the generative apparatus before unknown, and a direct result of normal activity. The flaccidity of the vaginal walls is supplanted by contractility; the relaxed ligaments of the uterus become tense; the perineal muscles are developed; prolapsus uteri is impossible; leucorrhœas are absent, because dependent upon debility, malposition, and displacements; the secretions are normal, because the parts are in a normal condition. Now this is not theoretical, or at least is only the theory for the explanation of absolute facts which have come under the observation of myself, or of those who were well capable to judge; and who have communicated them to me. They may, perhaps, be called "coincidences," but the pustules upon the skin are also coincidences which, with others, make up what we denominate small-pox; and the coincidences which I shall proceed to relate may be found to be as marked and persistent as the variola cicatrices.

A case has been reported to me by a member of the Academy, of aggravated uterine disease, accompanied by prolapsus and leucorrhœa, which was of many years standing, and which had resisted all treatment, including pessaries, and other local applications, which was cured entirely and solely by the result of systematic and vigorous muscular exercise, united with healthy diet, and stimulating mountain air. Such cases are not unfrequent. Passive motion in a part produces a circulation of the stagnated blood, in its enlarged, congested vessels, and in their diseased condition is, perhaps, all the stimulus that they can bear. Active exercise or motion is only compatible with a comparatively healthy condition of these organs.

We will not seek to develope this view, but be content with its simple suggestion. But while the trundle-hoop, dumb-bells, and gymnastics generally, which have no result other than increased vigor of body, are recommended as prophylactics and invigorators, either partial or general, the exercise required in working a sewing machine should not be disregarded, especially as in addition to increased health, the pecuniary returns are worthy of consideration."

Combine now with this that open air exercise which the abbreviated hours of labor gives the sempstress opportunity to enjoy—let what work is done be done in salubrious, well ventilated rooms—let her cease to wear the the outrageous contrivances for beautifying (!) the form, which so often weigh down and oppress with their abnormal temperature the organs of the back and pelvis—give her good nutritious diet which, even if poor a few hours work with the "sewing piano" will enable her to procure, and in a brief period one of the largest classes of obstinate diseases with which the physician has to cope will disappear from daily observation, and scarcely be known, save in the books, as an altogether historical matter.

And the practitioner will in the end be a gainer, for this class of cases is largely made up of those who have exhausted his time and skill and patience with exceeding small returns of *honoraria.* The *opprobria medicinæ* will be lessened in number, and consequently the respectability of the profession enhanced.

We look upon the sewing machine as a grand auxiliary to the true physician, worth infinitely more to him than a whole pharmacopœia of new drugs which will lessen the number of the heart's beats per minute in the most marvellous degree, or which will "oxygenate the blood" in a manner most mysterious in extent and wonderful to behold.

The War and Homœopathy.—There is at least one good thing towards the bottom of the Pandora's box of evils which the great war has opened. For now the sick of the half million or so of men in the army are collected in masses where they can be observed by many at once, instead of being sparsely scattered hundreds and thousands of miles apart. The effects of treatment cannot be disguised. Abstract theories are brought to observable practical tests, and visionary speculations have to assume tangible form. The ignorance which, diluted and scattered over the wide superfices of private practice, could with difficulty be detected and satis-

factorily exposed, in the compact throng of the army sick, is dragged from its obscurity and made glaringly obvious. The thin disguises of knavery and shallow pretension have been stripped off, and the chaff has been blown away from the wheat in the most satisfactory manner. In nothing is this more obvious than with regard to the attempts made by the homœopathists to foist their creatures upon the soldiery in the guise of medical attendants. Eight or ten months ago and they were rampant. They besieged the departments, protested in newspapers, assailed the President, and chose Mr. Senator Grimes, of Iowa, as a fitting conduit through which to pour out their noisome nonsense upon the Senate. They took the Commander-in-Chief captive, and kept the national army at a stand-still for four mortal weeks, whilst the Confederates threatened the Capitol, and they were titillating his palate with pellets of *Saccharum lactis* and teaspoonfuls of infinitesimal dilutions "chemically pure," with the identical teaspoon reposing on the top of the tumbler with its axis parallel to the meridian, like the wooden guns upon the Manassas fortifications, innocent and oblivious.

Here and there one of their disciples floated into the army disguised as a "regular"—and great was the jubilation of the Liliputians thereat. The newspapers puffed them, and even the God-fearing "Tribune," of this city, blew a nasal blast in token of rejoicing, much to the detriment of bystanders.

To-day, throughout the entire extent of the grand army, there is scarcely one so poor as to do them reverence. The departments at Washington are freed from their solicitations, the President from their impertinences, the Senate from their disturbing clamor, and even the Commander-in-Chief sends to Albany for Professor March to attend to his contusions, instead of telegraphing to New York for *Marcy*.

Homœopathy attempted the army and has found its Waterloo. It must henceforth conceal itself in the shades of private life—continue to dance attendance upon dyspeptic parsons, vaporous dowagers, and neuralgic spinsters. The atmosphere

of the camps is too harsh for its delicate tissues, and the poor moth must quietly prey upon the curtains and carpets of a *parvenu* aristocracy, and not tempt destruction by approach to the torch of military glory. We commend its silence, and now suggest that it get itself decently buried before the army returns to dig for it an unhonored grave.

Diseased Milk.—The New York Legislature has recently passed an act to prevent the sale of impure, unwholesome or adulterated milk. The statute is a stringent one, and its penalties of such a character that its violation will be a matter of serious personal risk to the criminal. The "swill milk" business appears about to be done away with in New York. Much credit is due to the parties who have labored assiduously to abate this filthy and deadly nuisance. We hope to see other States following the example of New York, thus putting an end to the annual "Slaughter of the Innocents," which the nefarious traffic has brought about.

Hygienic Measures in the Army.—An eastern contemporary permits the use of its editorial columns by some anonymous writer to attack the editor of the Philadelphia Reporter, a job which the responsible conductors of the first mentioned paper have still too much self-respect to indulge in. Accordingly they put forward some other ☞ to do it. This ☞ man is evidently a "hot-livered grammarian," and "nothing if not critical." He probably travels at the expense of the Sanitary Commission, and writes under the potent influence of the prophylactics they so urgently recommended. The editor of the *Reporter* is amply able to take care of himself, even though this care may require the utter demolition of his assailant. All that we have to say about the matter is, that ☞ manifests a degree of ignorance of the so-called malarious diseases which, in a writer for a metropolitan monthly, is something more than deplorable. It is clear that he has not the slightest *practical* acquaintance with the class of diseases

referred to, but has gathered all his notions at second hand from mere theorists. He declares that the plain and obvious hygienic measures, which *only* will prevent the incursions of "malarious" disease, are "utterly unattainable by an army in the field," and hence resort must inevitably be had to continuous dosing with Quinine as a prophylactic.

In the first place the record of many regiments in the field will show that these hygienic measures are very easily attainable, and the grand reason why "regulars" are far less liable to these diseases is, because their discipline more nearly secures their attainment.

The Quinine prophylaxis is, in the large proportion of cases, a mere dodge, or temporary expedient, to escape the necessary result of official laziness and incompetency, and private recklessness and insubordination.

The young gentleman quotes, with evident admiration, the remark of some one about the quinine theorizing "coming with tidings of joy and words of comfort to those who are subject to the influence of the poison." Is he so recent a neophyte in the medical ranks, as not to know that the very existence of such a "poison" is altogether hypothetical and speculative, and that, therefore, in the present time, treatment sought to be based upon such an idea is unworthy the age, and unworthy a scientific profession?

Diseases are not entities, attacking men as Indians do their victims; neither are the causes of diseases, save in rare instances, distinct and separable.

Disease is an orderly phenomenon, the resultant of all the forces acting upon the material of which the body is composed. Disease as the result of particular poisons is a phenomenon rarely seen—the search for the particular poisons which may beget disease, it is the glory of the profession at the present time, has been measurably merged in the investigation of larger, more pervading and general laws, the infringement of which brings disorder to the physical and psychical being.

Time was when disease was attributed to demoniac posses-

sion; then to witchcraft and enchantments; and then to specific poisons more or less occult, and then a large share of the medical world went off in vain quest of specifics, antidotes, counter poisons.

This "quinine prophylaxis" matter is but a shadow of the darkness of old time projected over upon the present, intensified by the same mode of support as the Catholicon, Morrison's Pills, or Brandreth's. "Instances confirmatory" can be gathered plentifully as blackberries. We remember when the whole North-west went mad over the same delusion and snare. Has the course of that empire gone around the globe to get to such distinction "down East?" For we speak what we do know when we say that, it has lost it sway where it originated—on the plains and along the watercourses of the North-west.

So far as appropriate hygienic measures are "attainable" in the field, so far will the army be freed from this class of diseases. So far as they "are utterly unattainable by an army in the field"—so far will that army suffer from its ravages, and neither Morrison's nor Sappington's pills, neither Osgood's Indian Cholagogue nor Quinine will prevent.

Let the Homœopathists, the nostrum venders and quacks of other hues enter upon the wild goose chase for specifics and prophylactic drugs, but let no educated medical man prostitute his faculties to such a scarlet woman, or, rather Ixionic cloud.

Researches and Observations on Pelvic Hæmatocele. By J. Byrne, M. D., M. R. C. S. E., Resident Fellow of the New York Academy of Medicine, &c. Monograph. From the Author. 1862.

We had prepared a notice of this excellent monograph, but the unexpected amount of matter previously in type has crowded it over to the next number. The importance and interest of the subject is such that we are unwilling to condense our notice beyond the limits embraced in the article written. At present, therefore, we can merely thank the author and strongly commend his essay.

An Address delivered before the Buffalo Medical Association, April 1st, 1862. *By Dr. C. C. F. Gay, President of the Association, on retiring from the Chair. Published by vote of the Association.*

We have marked several paragraphs of this very able address which we shall take the liberty to transfer to subsequent pages of the JOURNAL.

The author will please accept our thanks for a copy. We congratulate the profession of our sister city on the excellent exposition of true medical science afforded in the address of their late presiding officer.

Treatment of Diabetes.—A communication by *M. Demneaux* to the Prussian Academy of Sciences, chronicles successful treatments of saccharine diabetes by equal parts of calcined alum and rhatany.

The alum, alone or with other astringents, has long been employed in the treatment of diabetes, but we think opium, or morphine, added largely, enhance its beneficial influence.

Food in Febrile and Inflammatory Diseases.—There comes a period in every inflammatory disease, when food of nutritious character becomes indispensable to successful management of the case. And this point, we are certain, is arrived at much earlier than frequently supposed. The appetite is by no means the test—neither emaciation nor extreme prostration. As soon as there are rational and physical evidences that the height of active exudation has been passed, thoroughly digestible and nutritious food should be given, even though anorexia or other symptoms of dyspepsia be present. In fact the greater portion of treatment, from that period, must be directed to the digestive derangement. Healthy blood is the best lotion, external or internal, which can be applied to a diseased part. In simple febrile affections the "feeding point" is earlier still. The expression, "living on *the fever*," is the rankest and most murderous nonsense ever uttered. Modern physiology and pathology have utterly exploded the old notions upon this subject.

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ORIGINAL COMMUNICATIONS.

HERNIA CEREBRI.

By R. L. REA, M. D., Prof. Anatomy Rush Med. College.

Few diseases in the entire range of surgical knowledge have received so limited a share of the attention of the profession as Hernia Cerebri. This is particularly true of this country. I became convinced of this in searching for materials to aid in the preparation of the present article. This may be accounted for principally in the rarity of the disease, and yet diseases equally rare and more obscure are not so much neglected. It cannot be from the discouraging fatality of the disease, for in Hydrophobia and Tetanus we have mortality typified, and still these receive a liberal share of attention.

The subject of Hernia Cerebri claims additional attention at the present, from its probable increase in military surgery. For it cannot be that the thousands of sabres and the hundreds of thousands of muskets and other emissaries of death now in use, will fail to do some ragged and unscientific trephining. One so interesting, so little studied or understood, and withal so capable of profitable study, should not be overlooked in the vast field now open before us.

Objections have been urged to the name Hernia Cerebri, from the fact of disbelief in the nature of the tumor.

The term Hernia applies to any tumor formed by the escape of any viscus, or part of the same, from its accustomed cavity. The term Cerebri refers to the Brain. Many doubting the character of the tumor or finding exceptional cases in which it was a fungus growth from the brain, have disallowed its cerebral nature, and denominated it Fungus Cerebri.

In injuries of the cranium where a tumor forms, in a vast majority of cases—in fact the rule is, that it is the substance of the brain—we would see in that a sufficient reason for retaining its name. There are rare cases in which none of the cerebral substance may be embraced in the tumor, but that should no more change the name of the disease than the exceptional absence of membrane should change the name of Membranous Croup, or the name Hysteria because of its occasional occurence in men.

This form of disease can occur under but one condition, the want of cranial support for the brain—an absence of the walls of the skull and the membranes enclosing it.

This may occur through congenital deficiency of the parts, or by their accidental destruction, either by force applied, or syphilitic caries, or it may follow the application of the trephine.

When coming from either of these causes, the membranes are defective primarily, or are destroyed, giving way before the hernia takes place.

These, then, are the circumstances under which Hernia of the Brain must happen, but it by no means follows that under the same apparent conditions, hernia will always occur.

Here we meet with one of the most perplexing facts in connection with this fertile and seemingly contradictory affection. In one instance we have an injury to the skull requiring a removal of a portion of it—the membranes are found to be lacerated, and the operation is soon followed by a protrusion of the brain through the newly made opening. Another in-

stance is observed where, so far as we are able to see, precisely the same conditions are present, skull removed, membranes torn, and equal violence applied; and yet no symptoms of Hernia present themselves.

What are the circumstances involving this difference of result?

In order to determine this, we must first determine, if we can, the cause of the protrusion, and before doing this it will be indispensable that we know the nature of the protruded substance.

Reversing the order of the inquiries as stated, then we will first inquire into the substance which we see appearing through the opening. The inquiry comes in properly here, for if it be a true fungus, no force will be needed to cause its increase in size beyond ordinary growth; but if it be brain, another agency must be present.

It might interest us much and profit us little to discuss the opinions held by different observers as to its nature. Suffice it to say, some have maintained it to be granulations of a fungus character, forming on the surface of the brain; others that it was semi-organized blood, while by others it is decided to be brain substance itself. While the latter opinion is now almost universally conceded to be the true one, we must not too hastily condemn the seeming want of care in the observations of those who hold the former. The tumor seen after it is fully formed, is well calculated to deceive any one relying upon its external appearance. From the color of brain matter when it first appears, it speedily becomes covered with effused blood, which darkens by exposure, so that the tumor soon has the color of a clot of blood. When ulceration begins, and this effused blood is thrown off, it assumes the appearance of an ordinary ulcer.

The Microscope, however, is the true test. Whatever we might decide from appearances, when the substance is carefully examined in this way, and decided to be of any given kind, it sets inquiry at rest.

Examinations made with the microscope unmistakably show that the matter which appears through an injury done to the cranium, is in almost every case true brain substance. And yet while this is true, they quite as unmistakably show that in rare cases no brain matter whatever is detectable, the mass being composed of fungus generations or partially organized blood.

Some cases occur in which it is a combination of either or all these elements. This has been most satisfactorily confirmed by the observations of Dr. Adam Clark and Dr. C. E. Isaacs, of New York.

Before seeing an account of the examinations of these gentlemen, I had my mind very fully made up that it could be nothing else than brain, coming to my conclusion from that very satisfactory kind of evidence—my own senses. However easily we are deceived, we are very apt to place implicit reliance in any thing as seen by ourselves, and strong proof is required to disabuse us of our errors. Two cases which had come under my own observation, furnished me with the most conclusive proof that it could be nothing else than brain.

In one of these, the one appended to this article, I witnessed immediately on the removal of the skull, which had lacerated the membranes, the commencement of the tumor. The substance of the brain was easily recognizable, without the possibility of a mistake in its consistence and color—and within the hour or so that I remained with the case, it was plainly to be seen slowly increasing with each arterial pulsation. In the other case referred to, I made an opening through the Dura Mater for the escape of blood. As soon as the contained blood had escaped, the brain substance began to make its appearance through the opening—the patient dying however, in six hours, before a tumor of any size had developed itself.

In the former case, in which I removed a portion of the tumor, the colors of the white and gray matter were clearly distinguishable.

If any thing further were needed to confirm an already proven fact, it might be mentioned that in cases where portions of the tumor have been removed, and death following, a depression will be found corresponding with the removed part. While this furnishes evidence of its brain nature, it also furnishes the objection that the amount of depression found seldom bears any just proportion to the amount of tumor removed. This is accounted for when we remember that the brain is intensely congested, and that the part which is extruded is greatly hypertrophied, and a part which was large on its removal, containing more blood and less than its normal amount of brain, leaves a proportionately small depression on the surface of the brain, when death taking place, and congestion removed, they occupy their normal limits.

Having settled pretty conclusively the nature of this tumor, we will now direct our attention to the more fertile inquiry concerning the agency or agencies at work which produce it.

Suppose a portion of the cranial walls with their soft parts destroyed, from any cause, what constitutes the active agency in causing the brain to protrude through the opening thus supposed to exist? Various as were the theories with regard to the nature of the material of the tumor, they are limited, compared with conjectures as to its protruding force.. Of one thing we can have no doubt, that there is an active force somewhere, tending constantly to dislodge the brain. It is not a growth in but the fewest cases, as we have demonstrated. Neither does the brain grow out of or inherently tend to leave its cavity, for every natural law tends to keep it there. Neither can it be that the brain possesses a vernacular ability to extricate itself or pour out as fluids. Every thing tends to show that there is an agency independent of but acting on the brain.

Most of the opinions held have reference to inflammatory action going on in the brain. All, in fact, either have reference to inflammation or its products. Some of them are embraced in the following extract taken from Dr. Weir's article in the New York *Journal of Medicine* for November, 1859:

"Stanley says that to produce a Hernia Cerebri, there must be an increase in volume of the contused parts, caused either by a general distension of the blood vessels of the brain, or by the addition of some new matter, as water or pus.

"Samuel Cooper states that Hernia Cerebri is a disease connected with deep seated changes throughout a great part of the brain, conjoined with removal of bone. The changes alluded to may be supposed to cause an increase in the general contents of the skull, and thus a disposition to protrusion as rapid as the serum and other fluids are effused.

"Brodie, in compound fractures of the skull, the brain having lost the support which it derives from the dura mater, and having its vessels loaded with blood, would probably protrude in the form of Hernia Cerebri.

"Guthrie, it arises from a low grade of inflammation of the brain.

"Miller, with Drs. Laurie and King, ascribe its appearance to disorganization of the brain by inflammation.

"Sedillot says the appearance of the Hernia is caused by a distended ventricle.

"Propulsion from the arteries is adopted by Flourens and Dr. N. R. Smith."

Thus it will be seen that inflammation, its preludes and accidents, are foremost in the minds of the writers mentioned, as the cause.

Guthrie pronounces it a "low grade of inflammation," with what propriety I am unable to determine. Its occurrence in the robust, and during the continuance of all the initial and most violent symptoms, would seem to disprove this, as well as the fact of its rapid formation after the injury, as most frequently takes place.

The ideas advanced by Drs. Miller, Laurie and King would seem to be disproved by the fact of its immediate occurrence in some cases without time necessary for "inflammatory disorganization."

It is difficult to understand what the exact meaning of

Cooper's "deep seated changes" is, unless it is inflammation and its products.

The "distended ventricle" of Sedillot, is of course from serum or pus, consequent on inflammation.

Stanley has the merit of at least being clearer if not nearer right, though he does not mention inflammation as such.

The succession of phenomena, as they would naturally take place in this accident, seem to me to be as follows: An individual receives a blow on some portion of the head of sufficient force to drive in the skull and lacerate the membranes. The patient falls insensible, and if the injury be not too severe, reaction will come on, and he will return to consciousness—or compression may come on preventing this. What changes go forward in the brain? At the first the stun or shock causing insensibility, during which time the circulation will be depressed, followed in a longer or shorter time by reaction with its increased circulation, and afterward the ordinary succession of inflammatory phenomena. Within a few hours, at most, the patient will be seen, the skull trephined, upon the removal of the bone a tumor will soon occupy the opening, which may be seen to gradually increase in size, with each pulsation of the arteries a distinct swell will be perceived, which will as regularly subside with the cessation of the arterial action. This was most distinctly marked in the two cases which have come under my notice.

First, then, let us determine, if we can, what are the causes at work to produce this calamity, and afterwards decide as far as possible as to the difference in the causes, or their amount, which in one case will produce a Hernia and in another are followed by no such evil effect.

The cranial cavity is a vacuum plenum. There may and I think is, a variation often as to the relative amounts of the contents of the cranium. The quantity of fluids contained in that cavity varies at different times, under different circumstances. I mean that more fluid can be condensed into the cranial cavity than is usually present or

necessary for its normal and healthy action, and this may take place within certain limits without permanent detriment. This fact, though formerly much mooted, seems now well settled. We are of course justified in assuming that the quantity of brain, or the size of its case, does not vary.

We are all familiar with the well known effect of exhausting diseases on children, as shown by its effect on the fontanelles. In the well fed, hale infant, we have at the situation of the anterior fontanelle, the plump, protruding, pulsating brain, arising on a level with or even beyond its bony surroundings at each succeeding arterial pulsation. Let an exhausting disease of any kind seize our little subject, and speedily as the progress of the disease marks itself will our cerebral barometer sink. The brain, unsupported by bone at this point, takes recess from its accustomed compression by extruding with each action of the heart. This will of course depend on having a natural condition of the cranial contents, and then adding the injecting force of the heart upon the blood thrown into the brain at each beat. The combined dilation of the arteries acting on the brain will produce the phenomena we have noticed. Add to the ordinary cranial contents serum or other material, and of course you increase the protrusion to its limits, or compress the brain proportionately. Diminish the amount of complemental serum surrounding the brain, which is sometimes termed the "Hydrostatic bed," or weaken the action of the heart, and no such effect is observable, for the sum of the dilatability of the arteries will only distend the cranial contents to their ordinary level, and instead of a protruding of the brain through the fontanelle, it will only rise to its medium level or fall below it, and exhibit its characteristic appearance under depressing diseases. It is most evident that this peculiar action of the bran in infants is owing to no vessel immediately in the vicinity of the fontanelle, for there is no artery upon whose dilation it could depend, and the action being synchronous with the heart, must depend on it. That the brain sustains vascular pressure constantly, is

well proven by the fact of its sudden removal causing swooning and a cessation of its function. The effect of any abnormal condition causing an increased flow of blood to the brain, or increasing the force of the heart, must add to this pressure. In the sleeping and waking states, a difference is noticeable in cases where absence of a portion of the skull has allowed the observation, in the sleeping state subsiding below the level, while upon waking the mental stimulus causing an increased flow of blood, fills up the organ to its usual wake level.

From these facts, it is fair to conclude that a force acting upon the brain as expansion of the arteries is capable of compressing the brain to a certain limited extent, and under certain circumstances causing it to protrude from its cavity. The brain, accustomed to receive the shock of the heart's action through the arteries, is supported by the membranes and osseous walls; and when a portion of the brain is deprived of this support, the tendency would of course be to give way before the pressure. It is with the consistence of the brain in mind that we could compare this action to that of the piston of a syringe in expelling its contents. A quantity could be expelled by the introduction of the piston, the size of the piston governing the amount thrown out. However small the piston, this would be true, and carrying out the comparison, the force requisite to expel would depend on the consistency of the substance to be expelled.

Hernia of the Brain, as a rule, follows the application of violence to the head. An amount of violence necessary to fracture the skull will seldom if ever fail to produce inflammation, with its attendant congestion and hyperemia. These effects will cause an increased amount of blood to be sent to the brain, and with additional force, which is but a repetition of the old maxim, "Ubi irritationis, ibi fluxus."

I think we are warranted in concluding that the force of arterial action being sufficient to drive the brain before it in a healthy condition, is abundantly able in a diseased condition of it, when we add the increased action of the heart, and the

exaggerated amount of blood which determines to it, and still further if we diminish its capability of compression by condensing it by inflammatory or congestion effusions. The idea I attempt to convey is this: The dilating arteries find a recess for their dilation, so to speak, in the compressibility of the brain. Should this be prevented by an effusion of serum, for example, previously acting on the brain, their expansion would be correspondingly limited, and the brain of a doughy consistence impressed upon at one point will extend itself naturally in that direction in which there is no resistence.

Hence I conclude that the protrusion of brain in this accident is caused by the force of the blood driven into it, the effect of the injury inflicted, which may or may not be accompanied by inflammation, and aided by its effusions.

This being conceded, we now take up that other question previously alluded to, Why in injuries involving a removal of a part of the skull, Hernia Cerebri does not invariably take place?

My friend, Dr. Bogue, of this city, was called to a boy fourteen years of age who had been kicked by a horse, knocked down, comatose, in which he found a considerable portion of the skull in the right parietal region comminuted and depressed, which he removed to find the membranes lacerated and portions of brain forced through their opening. Within twenty hours he was conscious, and from that he had not an untoward symptom. He made a rapid, safe, and perfect recovery.

Here is the counterpart of my own case to all appearances, and yet Hernia did not take place.

As to whether a Hernia will form in any given case, it appears to me will depend on one or more of the following conditions:

First, the amount of original injury. The liability of the brain to be forced through any given opening will of course depend upon the degree of its solidity or consistence. To resume our illustration of the syringe, the thickness or thinness of its contents will determine the force necessary to ex-

pel them. We can easily see the difference in trying to throw through the syringe successively water, syrup, and tar, the first passing through with perfect ease, the second requiring more force, and the latter scarcely capable of going through at all, though all are liquid. So I take it will the ability of the forces at work in extending the brain depend on the solidity of the brain substance.

The amount of force occurring in the production of injuries of this kind will of course vary very much. In some being simply enough to fracture the bones, without being powerful enough to extend its destructive effects to the substance of the brain in the injury of its structure. In others, as falls from heights, violent blows, &c., the injury not only breaks the bones and lacerates the membranes, but extends its influence to the brain, producing contusion of its substance, and if examined will be found soft and pulpy. The examination of one of my cases proved the existence of this condition, the brain corresponding with the seat of injury being completely broken down and in a softened and semi-fluid condition.

It is evident then that this softened state in immediate juxtaposition with the opening will greatly predispose to its occurrence. In addition to the condition of the brain thus produced by the original force, the other conditions accompanying violent injuries will be present—as a high grade of congestion, inflammation, &c., which we have concluded are the active agents at work in the production of the Hernia, and therefore will give as additional reason to expect the occurrence of this accident, the brain being supposed to swell when unrestrained under inflammation as other organs.

Second, consistence of the Brain substance as depending on abnormal softness or age.

Any one accustomed to making post mortem examinations must have noticed the different degrees of hardness in different brains. Some are of a firm and comparatively solid consistence, while others are but little harder than thick cream. This, with other conditions, give us our presumed predisposition.

An idea with reference to the enlargement of the skull and the connection of age with Hernia is advanced by Humphrey in his work on the Skeleton.

The head of the child as we know is disproportionately large compared with the other parts of the body. The economy of this arrangement he contends is that from the conformation of the cranium its enlargement must take place very slowly owing to the fact that it can increase in size only by the growth which takes place on the contiguous margins of the bones, and by the resorption from their inner and deposition on their outer surfaces.

The enlargement of the capacity of cranium then, must needs be very slow. According to his theory, the head of the child, large in the first place, contains a brain with a large per cent. of water added to the normal elements of brain, and as a consequence is soft and flaccid. Instead of the brain and head enlarging rapidly as the developing mental faculties demand new and increasing supplies of brain substance, instead, I say, of the brain's enlarging to supply this entire demand, while it can grow but slowly, it adds to its power by condensing its structure, so that were it not to enlarge at all it might contain a considerable addition of cerebral matter.

The Hernia Cerebral part of this fact is that the brain of a child is softer than the adult, and that it continues so until the complete development of the other parts of the body. Youth then, I infer, is a predisposing cause of the disease. My idea is borne out by the facts in the cases collected by Dr. Weir, before alluded to. Of fifty-five cases, the average was twenty years. When we consider that those very young are seldom exposed to dangers which would likely produce this injury, that they occur from severe blows received in fights, falls from heights, and in mechanical pursuits not followed by children, we can understand this seeming high average age. In Dr. Buck's cases, seventeen were under twelve and twenty-six under twenty years of age. Ericksen in his work mentions the fact of its more frequent occurrence in children.

Still another circumstance governing its occurrence will be the size of the original osseous opening. As the enlargement of the opening may be regarded as a part of suggested treatment, the philosophy of it will more properly come in there, to which place the reader is referred.

The occurrence of Hernia, after the application of the Trephine, requires some notice before leaving the productive causes.

Here it might be said we lack the inflammatory action necessary to produce this effect. We must remember that the Trephine is always used to remedy a disease of some kind effecting the brain, and applied in its immediate vicinity. What condition the brain may be in in cases in which it occurs cannot of course be determined, but I think we may conclude that one of the conditions mentioned, either a distending force applied to the brain or an unnatural flaccidity of it. The brain under the influence of disease may have softened, and the application of the trephine would be followed by more or less vacular excitement.

Dr. Gross, in his work, mentions that the worse case he witnessed followed syphilitic destruction of the walls and membranes. He does not state the nature of the tumor, however, whether it was brain matter or fungus granulations. If the former, the same explanation would naturally follow for this case as the last—softening and vascular action.

The question would very properly be asked here, Why it is that Hernia occurs often a number of days after the receipt of the injury? Why does it not take place immediately after the injury is inflicted? This class of cases I think can be accounted for, not from the violent primary congestive action or from contused condition of the brain, but that it will be found to happen in connection with the products of inflammation, either in the form of an abscess or serous effusion, as we have in a distended ventricle, or a collection of blood. Dr. Buck says, "in all the cases he examined an abscess was found in the substance of the brain or upon its surface in the

immediate vicinity of the Hernia." The formation of these depots of serum and pus would correspond in point of time with the date of the delayed Hernial protrusion, and I think in justice might be assigned as the cause, when the violence of the vascular action does not produce it at an earlier period.

The prognisis in this affection is very uncertain. With seemingly small injuries, many die, and those apparently helplessly hurt, recover. This depends, I doubt not, on the difference between the apparent and real amount of injury. In individuals where there is not too much inflammatory element, where the injury is not so severe as to give rise to extensive constitutional disturbance and the constitution good, we have a right to anticipate a favorable result with prompt and efficient treatment. Too often the amount of injury received by the brain is beyond our cognizance and from a vitiated constitution thwarting our efforts, the result is fatal. I could by no means agree with Dr. Gross in the opinion, however, that "recovery is an extremely rare occurrence in any case, however simple," when I remember that sixteen out of the thirty-three cases of Dr. Buck recovered.

The length of time occupied by this malady is subject to much variation, the patient dying occasionally as early as the first day, and again lasting for months, dying worn out of nervous irritability; in the former case the the result of the overwhelming nature of the injury, and in the latter of centric irritation.

John McNulty, Irish boy, aged 14, was engaged driving a horse hoisting coal from a vessel; while thus occupied, he got into a quarrel with another boy, who seizing a piece of coal threw it at him, striking him a little above and outside the left frontal eminence. He was taken up and carried home insensible, and Dr. Baltzell called to see him nextday, October 4, 1859. I accompanied the Dr. to see him and found him only partially conscious, pulse 128, skin hot, pupils dilated, with an incision in the locality named. Upon examination, we found a fracture, and the fragment depressed. By request of

Dr. B., I removed the portion of bone, which was readily done by enlarging the incisions, the fragment being entirely detached was easily removed with the bone forceps. It was irregularly triangular, the sides of which were as near as may be one and a half inches. Upon removing the bone, the membranes were found cut through to the extent of half an inch in length. The wound bled but little and was closed in its upper portion. Before closing the wound, I noticed in the situation of the opening through the Dura Mater, what I supposed to be a portion of brain beginning to protrude. It was of a greyish white color, and pulsated with the action of the heart. It being my first experience with this class of affection, I did not feel sufficiently certain of its character to decide on its treatment. Accordingly we contented ourselves with closing the wound, as I have said, applied cold water to the head, and ordered a saline cathartic. We visited him about 5 P. M. same day, and found him about same, except consciousness, which seemed improved, though the cathartic had not operated. The tumor which we noticed at our last visit, is increasing in size. Cathartic ordered repeated, and cold continued. The next morning, (5th Oct.,) upon visiting him, we found there had been a free action of the cathartic, with a decided improvement in his general symptoms. He was entirely conscious, pupils more natural, skin cooler, and converses sensibly. Complains of pain in his head, not particularly located at the wound. The Hernia has increased in size until it now amounts to that of a small hazel nut. The Dr. having kindly given the surgical management of the case to me, I concluded to shave off the protruding portion of brain, which I did on a level with the surrounding part, upon doing which I noticed an enlargement of the original opening through the Dura Mater. I then prepared a compress the size and shape of the osseous opening, saturated it with Mur. Tr. Iron and applied, it, covering it with another dry one, both of which were firmly bandaged on. The removal of the brain did not cause the slightest pain, nor was it followed by any hemorrhage.

The next day, 6th, we found him doing well, no inconvenience from the dressing, had suffered no additional pain, slept moderately well, still somewhat feverish, but every way seemed quite as well as we could expect. Upon removing the dressing, we found it had retained the brain in position perfectly, and had fulfilled my expectations in the formation of a crust over the surface of the brain. Dressing applied as before.

On visiting him the 7th, he seemed much improved bright, and cheerful, no pain or uncomfortable feeling about his head; his wound appeared in unexpectedly good condition, the brain being quite to its level, pulsation in it almost ceased, with so many good symptoms and the brain so firm, I was misled by appearances, removed my dressing, closed the wound over it, and applied cold water dressing. A visit that evening proved I was mistaken in the firmness, for unrestrained it had already began to enjoy its liberty, and was bulging. The following morning found it protruding beyond its bony margins, the Dura Mater having given way probably under the influence of the Tinc. Iron, the tumor completely filled the opening, being in substance the size of a medium hickory nut. This I removed completely as before with no different results. No inconvenience was experienced by the patient, either at the time of the excision or afterward. The Tr. Iron was reapplied and continued from day to day by Dr. Baltzell, with whom I saw the case frequently until the cure was perfect. Within a few days after the application of the Tr. Iron, suppuration began on the surface of the brain, the crust which was formed loosened, but it was allowed to remain, and a fresh compress saturated with the Iron applied; the crust thus formed being an exact mould of the surface of the brain, gave equal pressure on all parts of it through the compress applied over it. Upon the removal of the brain each time, there was no diffiulty in distinguishing it, the color of the white and gray matter being easily recognized.

The case progressed favorably, though it was several months before he entirely recovered, and I think nearly five months

before the compress was left off. The experiment of leaving it off was never repeated until the brain became firm.

He recovered perfectly, no paralysis or unpleasant symptom remaining, the opening through the skull closing by fibrous membranes, and that it has left no mental defect is proven by the fact that he now pursues the calling of a newsboy in our streets, and is one of the smartest of that crafty class. In the application of pressure no unpleasant symptoms manifested themselves, though it was firm and constant. I saw the boy a few days since, and find the opening closed by a very thin layer of tissue, and can easily be compressed. No appearance of any thing firmer being formed, though it is near three years since the accident.

On no part of our subject is there such direct antagonism of opinion as on the treatment, our most distinguished authorities taking directly opposite views. This difference is mainly on the questions of excision and compression.

Guthrie disapproves excision, and depends on moderate pressure, lightly applied while the tumor is increasing, augmented while it is decreasing.

Cooper and Miller advocate same.

Stanly says compression is out of the question, and is undecided as to the use of the knife.

Ericksen advocates slicing off the brain to the surrounding level, and applies firm and sustaining compression.

From having treated my case successfully, I naturally sustain the views of the latter. There are many cases in which a modification of the treatment would be rendered necessary. As, for instance, in which a tumor had already formed of unusual dimensions, as occurred in the case reported by Dr. Mears, of Indianapolis, in the Northwest Medical Journal for October, 1848, when it arrived at the unusual size of of "a section of a middling sized orange." In this case no other treatment is reported except slicing small portions away from the surface of the tumor, the patient recovering, slightly paralytic, on the opposite side. Removing so large a portion of

brain could be nothing but deleterious. In such cases, with moderate slices could be well combined styptics, as the Tinc. Iron, and moderate and judiciously applied and sustaining compression. When, however, the surgeon is called at the time of the accident, there is but little necessity for the formation of such tumors. If the proper remedies are used, I should have little fear of any such result. As soon as the protrusion is discovered, prompt steps should be taken for its arrest. Antiphlogistic measures should be adopted and carried as far as the case admits, and the support of a compress applied over the part. The kind of a compress there is a variety of opinions, but I think a linen compress as good as any thing firmer, being entirely sufficient to retain the brain, and can be saturated with any desirable fluid. I used the Mur. Tr. Iron on account of its astringent qualities, and it answered so perfectly I should feel much confidence in repeating it.

There is a remedy which has since occurred to me in studying the cause of this disease, that I think cannot fail to exercise a controlling influence over it. I refer to Veratrum Viride.

If, as I have supposed, most of the curable cases are caused by arterial action, a ligation of the forcing organ cannot fail to exercise the most happy influence, and I should feel great confidence in this as one of my remedies in another case.

The application of compression to a tumor of any size previous to excision, I deem of doubtful utility. I think the suggestion of Dr. Buck eminently true. "May not," says he, "this protrusion be a salutary resource of nature to relieve the brain (often only temporarily) from the compression which an increased afflux of blood might occasion;" and therefore it could be nothing but the worst of practice to force back into the skull that which nature, under desperate circumstances, was compelled to cast away. After the brain was once extruded, and the vessels had expanded under the relaxation, the risk of compression of the brain would be vastly greater

in repositing the brain than under the original support of a compress.

As a final addition to our treatment, I may mention the suggestion of some, that an increase of size of the original opening would suffice to prevent further increase of size of the hernial mass. This idea is based on the supposition that were the compressed brain allowed to expand itself sufficiently by the removal, or enlargement of its walls to the required extent, it would of course have no tendency to form a Hernia, because it would then expand symmetrically. So we reason if any considerable portion of skull were removed, a corresponding portion of brain could expand and would afford room for the expansion of the distended vessels, and render its occurrence correspondingly improbable. Suppose, for instance, the brain had no restraining case of any description, and could expand and diminish in size with each varying circumstance of the circulation, then of course no Hernia could occur. If one half the brain case were removed neither would it, because there would still be room for adequate expansion. May not this have been the reason that in Dr. Bogue's case there was no Hernia, the opening being of unusually large size? I have measured the bones and find not less than $2\frac{1}{2}$ square inches removed. This treatment embraces the idea that a portion sufficient to give room for this enlargement would avoid the increase in size altogether. How far this has been attempted, I am unable to say; but it appears to me that in order to give the needed room, the Dura Mater must needs be removed to a corresponding extent, for we know Hernia does not form unless it be broken, owing to its want of elasticity. No doubt the principle is correct, but with this fact in view, it looks to me to be hazardous practice.

The exposure of a portion of brain of requisite size, for such a purpose, with the possible complications to which it may give rise, and the encouragement given to prompt treatment, would lead me to doubt the expediency of a practice which would add a risk to an already very mortal accident.

CASE OF HYDROPS AMNII.

By A. E. JOHNSON, M. D., of St. Anthony, Minnesota.

May 15th, 1862, I was called to attend Mrs. L., a lady about thirty-five years old, pregnant with her sixth child. She had arrived at full term of her pregnancy. She had suffered severely with headache, and also extreme dyspnœa for the last two months, which became intolerable on assuming the recumbent posture for more than a few moments at a time. She was also harrassed with violent cough for six weeks prior to her confinement. The abdominal walls were distended to their utmost, so much so that she suspected a triple or quadruple birth. The examination per vaginam detected the os well dilated. The pains had been slight and irregular for eighteen hours. The presentation could not be discovered. The membranes felt rough and very tense. A second examination, at the end of two hours, discovered no advance. The contractions had slightly increased in force and frequency, though still irregular. On placing my left hand upon the abdomen over the fundus of the uterus, and making pretty smart indentations upon the strong firm membranes with the index finger, the child was distinctly felt by the left as it impinged against the walls of the uterus and abdomen, pressing hard against the ziphoid cartilage of the sternum. I at once concluded that there was a great excess of liquor amnii, above the normal amount. I at once proceeded to rupture the membranes, and after several unsuccessful attempts with the finger I succeeded by the use of a strong knitting needle, there being no other instrument at hand, after considerable exertion.

The escape of an almost incredible amount of liquor amnii gave great relief to my patient, and to which the before enormously distended and apparently half paralyzed uterus soon responded with energy sufficient to deliver a very small well formed, with one exception, feeble female child by the breech

presentation. With much exertion the child was resuscitated. The time occupied in its delivery after the rupture of the membranes did not exceed forty-five minutes. It lived but twenty-four hours. There was an abnormal growth upon its right cheek about the size of an ordinary nipple.

After waiting a proper time the placenta had to be extracted, one-half of which was above an almost irresistible hour-glass contraction. The membranes were extremely thick, and presented upon their fœtal surface the evidence of many inflammatory patches. The placenta was small.

The exact amount of liquor amnii could not be estimated. The patient was laying upon a thick feather bed and a straw tick, well filled beneath it. Over this was a quilted cotton comfortable folded in four thicknesses, and the patient's quilted skirt loosely around her person. The amount of water which escaped was sufficient to saturate all of these and two full gallons passed through, which was caught in a pail beneath the bed. The whole amount, I think, could not have been much short of four gallons.

I had attended this lady four times in child birth prior to this, and nothing unusual had occurred.

Query: What was the pathological cause of this enormous accumulation?

Here was no constitutional peculiarity or syphilitic taint, which Churchill and Burns think "may be amongst the more remote causes of this disease." In this case, its cause must have been an inflammation of the amniotic membrane, the evidence of which was well marked.

M. Mercier, M. Davillier, M. Desmarais, M. Chailly, and others, speak of inflammation of the amniotic membrane as the most frequent cause of dropsy of the amnios.

Drs. Burns, Remsen, Kyll, and others, think "it may be connected with diseases of the placenta, such as cysts, tubercles, induration, dropsy, &c." But in this case, the placenta was to all appearance healthy and natural.

SELECTED.

ON THE CLIMATE OF THE MOUNTAIN RANGES OF CALIFORNIA, IN RELATION TO THE TREATMENT OF PHTHISIS.

By JAMES BLAKE, M. D.

In some former papers on Phthisis, published in this Journal, I have recommended the Coast Range of mountains as a preferable locality for the out-of-door residence of consumptive patients during the summer months. At the time I wrote these articles, I had no exact data as to the climate of this locality, my preference being founded on the beneficial influence that a camp life in these mountains had exerted in arresting the progress of the disease, in many of the patients I had sent there. At my request, one of my patients, who passed the last summer there, took the trouble to make a record of the temperature during July, August and a part of September, and the data I have thus obtained, furnish a sufficient explanation of the beneficial effects observed to follow a residence in these localities.

The following figures will enable the members of the profession to judge of the advantages of the climate for consumptive patients. They can, I am sure, be relied on, so far as they go, as I furnished the thermometers, one of which was suspended at the N. W. side of a tree, for the morning and noon temperature, the other on the N. E. side for the evening temperature, and the observations can be depended upon as correctly recorded. The hours at which the observations were taken, do not probably furnish the extreme temperature, as at least in July, the atmosphere has been somewhat warmed at 6 A. M., but the total variations are so slight, that the subtraction of a degree the 2 P. M. temperture, will probably afford a very close approximation to the truth. The locality of the camp was at a supposed elevation of 4,500 feet, about fifty miles north west of Colusa, and about twenty miles from the eastern foot hills of the Coast Range. For the sake of

comparison, I have appended a statement of the mean temperature, and of the extremes, as observed at Iowa Hill a locality in the Sierra Nevada, at about the same elevation. The observations were not made at the same time, but in the year 1855. They, however, together with others, show that the climate of the Sierras very closely approximates to that of the Sacramento valley, and therefore it is far less favorable as a summer residence for consumptive patients than that of the Coast Range.

Observations of the temperature were taken three times a day, 6 A. M., 2 P. M., and 6 P. M. I have only, however, given the monthly average of these observations, the extreme daily range in the month, and the mean daily range; and also the extreme range observed during the month. These data afford sufficient elements to judge of the climate, as far as its temperature is concerned, and when compared with the figures obtained from observations made in the Sierra and the valleys, plainly show wherein its advantages consist.

COMPARISON OF TEMPERATURE, AS OBSERVED ON THE COAST RANGE, AND AT IOWA HILL, ON THE SIERRA, AT AN ELEVATION OF ABOUT 4,300 FEET.

Mean Temperature for the Month.

	Max.	Min.	Mean.	
Coast Range,	75.6	60.8	66.2	(corrected)
Iowa Hill,	90.3	63.7	77.0	(observed)

	Coast Range.	*Iowa Hill.*
Mean diurnal variation,	14.8	26.6
Maximum temperature,	82	97
Minimum temperature,	57	52
Extreme variation,	25	47
Extreme variation on any day during the month,	20	35

August—Temperature at Camp on Coast Range.

	6 a. m.	2 p. m.	6 p. m.
Mean temperature,	55.3	69.5	63.7

Highest temperature during the month, 74; lowest, 47; mean daily variation, 14.2; extreme variation, 29; extreme variation on any one day, 18.

September—First Fourteen Days.

	6 a. m.	2 p. m.	6. p. m.
Mean temperature,	51.5	65.0	57.0

Highest temperature during the month, 76; lowest, 45;

mean diurnal variation, 13.5; extreme variation during the month, 31; extreme variation during any one day, 18.

The above figures show that, as regards temperature, our Coast Range, during the summer months, affords one of the most desirable localities for the treatment of our phthisical patients.

The temperature for July, is perhaps, that which is the most agreeable for living out in the open air—the thermometer never below 57 deg., and never higher than 82 deg., and with a variation, during the twenty-four hours, never greater than 20 deg. The comparison between the Sierra, at the same elevation, affords a striking contrast, for, whilst the average diurnal variation, in the first case, is only 14 deg., that of the Sierra is nearly twice as great, or 26.6 deg. An analogous contrast is evident through every important thermometric element of the two climates.

But it is not only in the advantages, as regards temperature, that the Coast Range affords a most suitable climate for phthisical patients, as in this respect it might be equalled, and perhaps surpassed, by many other localities, as for instance, the Sandwich Islands, Madeira, and other sea climates; but in this State, and, probably, in this State alone, are to be found combined all those climatic influences, which are even of greater importance than mere temperature, in the treatment of the disease.

Together with this agreeable temperature, the atmosphere is dry and bracing—almost always calm, and the sky is unclouded for months together. The last summer, there was no rain from the beginning of May until the end of November, so that my patients were not driven in by the weather until November. Towards the middle of September, they left their summer camp, for a lower point on the mountains, gradually descending as the season advanced. Unfortunately, I did not have any observations for other summer months, as it was not until they reached the greatest elevation, at the beginning of July, that observations were commenced. The climate, however, of the lower ranges, is analogous to that at greater elevations, and affords one of the most desirable localities for our patients, during the early summer and late autumn months.

Another important advantage the Coast Range of mountains possesses, is in the abundance of game, so that a good hunter can always keep the camp supplied.

With the return of winter, however, our patients necessarily have to seek the badly ventilated, sunless rooms of our habita-

tions, a great deal of the good that has been done during the summer is apt to be lost. Should the case be not very far advanced, and the improvement during the residence in the mountains have been as great as usually takes place, with care, our patients can hold their ground, during an average winter, in our coast valleys, or on the lower hills of the Sierra. But where they can manage to leave, they can, by going a few hundred miles down the coast, again enjoy all the advantages afforded by their summer residence in the mountains.

In the northern parts of Mexico, the rainy season, which corresponds to our winter, sets in in June and July, and is over by the end of October or beginning of November; after which time, no rain falls until May or June. There are many points on the coast, where the mountain range of the Sierra, commences at a slight distance from the sea, and, although the low land is unhealthy, being subject to malarious diseases, yet as soon as a moderate elevation is attained, the climate becomes dry and bracing, and very analogous to that of our own Coast Range during the summer. Fortunately, these locali- San Francisco and Mazatlan, is taking place, either by steamer or sailing vessels, three or four times a month. The country is well settled, and as large mining operations, conducted by our countrymen, are being carried on there, all sorts of supplies can be procured. About eighty miles back from the coast, the mountains already have an elevation of some thousand feet, and, although I have no accurate meteorological observations of the climate, yet, from the description of it by ties are now easily reached, as the communication between those who have passed the winter there, I am confident that it must be very analogous to that of our Coast Range. Our patients thus enjoy a perpetual summer, or, at least, a climate in which they can pass the whole of the year in the open air.

I believe, in no other part of the civilized world, can such favorable condition be found for treating phthisis, as on this coast. That the disease cannot be cured by drugs, is a fact becoming generally admitted by the profession. That it can be cured by out-door life in the mountain air, is a fact of which I have seen abundant proofs, and which others, who have crossed the Plains, have had opportunities of verifying. My own opinion is, that a large proportion of the cases of phthisis, will be found to yield to one or two years' open air treatment, and where the circumstances of the patient enable him fully to carry out such a plan, this coast offers, I think, by far the most favorable locality of any yet resorted to by phthisical patients—*Pacific Journal.*

CONSIDERATIONS IN REFERENCE TO HEALTHY, IN CONTRA-DISTINCTION TO DISEASED JOINTS.

From a Paper by JOHN SWINBURNE, M. D., Albany, New York.

In the Philadelphia *Medical and Surgical Reporter*, Vol. VII, p. 40, will be found an article, quoted from the San Francisco *Medical Press*, for July, in which Dr. E. S. Cooper lays down what he calls new surgical principles, and enumerates them from 1 to 7. In the main, I think the Doctor correct, but while all this may be true of a diseased joint, I would make the pertinent inquiry:

1st. Were you, as surgeon, to find a healthy knee joint, opened for two, three, or four inches in length, with a clean cutting instrument, would you allow it to heal by granulation? or would you rather close it by metalic sutures, as carefully as possible, with the object of obtaining union by the first intention?

2d. Were you called to treat a punctured wound of the same joint, would you close it, allow it to suppurate, or would you rather convert it into a full and free incision?

3d. In the operation for the removal of false cartilages from the joint, should your incision be large and free, and allow the same to heal by granulation? or should you strive to remove the cartilage by subcutaneous incision, and so heal the wound by the first intention?

There are some important considerations in reference to healty, in contra-distinction to diseased joints, which require further consideration, and I candidly confess (with my limited experience) that I am unable to give a solution of them. I would, therefore, invite the profession to investigate, carefully, this important and intricate matter.—*Philadelphia Med. and Surg. Reporter.*

[*To 1st Enquiry*—We would answer, that the parts should be brought together, with the view of effecting healing by first intention; but, at the same time, if the least purulent matter should be found in the joint afterwards, we would re-open it at once, and then make the wound heal by granulation.

To 2d Enquiry.—We would not convert the small punc-

tured wound into a free incised one, immediately upon being called to such a case, if of recent occurrence, but would do so at once, afterwards, if we discovered that there existed a single drop of purulent matter in the joint.

To 3d Enquiry.—In removing foreign bodies from the knee joint, we always make an incision sufficiently free to remove the substance readily, and then, generally, favor healing of the wound by first intention, by bringing the parts together, but never resort to the subcutaneous section. We have, however, operated several times by direct incision, and afterwards applying lint in the wound caused it to heal by granulation, and in every case with favorable results; but were led to quit the plan in consequence of concluding that it kept the wounds somewhat longer in healing.

The rule we have fixed upon, after modifying our practice somewhat from that pursued when first we departed from the beaten track by disregarding the admission of atmosphere, is to favor the healing of fresh wounds of healthy joints by the adhesive process, but wounds of suppurating joints we make to heal by granulation.

Remarks.—In the treatment of all wounds about the knee joint, whether accidental or made by the knife, we apply a roller around the limb as tightly as the patient can conveniently bear, commencing at the toes and continuing half way up the thigh. The pressure of the roller has a great influence in interrupting the mischievous process of suppuration and disorganization, which is the bane of these cases. A single drop of purulent matter is first generated from some portion of the injured synovial membrane, which, being of a soft and vascular structure, is disposed to suppurate under the influence of a slight inflammation; and this disposition to suppuration in a synovial membrane, together with the extent of development of this structure, in and around the joint, accounts for the rapidity with which purulent matter accumulates, in many cases after the slightest wounds, such as those made by the puncture of a penknife. The pressure of the roller interrupts, to a considerable extent, the flow of blood to this as well as all other soft structures entering into the formation of the joint.

Around the joint are numerous bursæ mucosæ, in which the disorganizing process often begins, though it may subsequently involve the entire knee joint. This is, by far, more frequently the case than any one not much accustomed to making inci-

sions into suppurating cavities about the knee would form any idea of. We have repeatedly made incisions into what we supposed, prior to the operation, to be suppurating joint cavities, but found the purulent collection altogether external to the capsular ligament. In these cases, the same excrutiating pain and rapid accumulation of pus took place as occurs when the joint itself is previously involved. The application of a roller, immediately upon the reception of an injury involving the extra capsular tissues alone, would, in many instances, prevent the formation of purulent matter at all; but, when once it commences, nothing but opening the parts, freely, offers any prospect of an early cure.—*Editor San Francisco Med. Press.*

SMALL POX AND VACCINATION.

By H. GIBBONS, M. D.

At the present juncture, when there exists an epidemic condition favorable to the development of variolous disease, it is important, both to the profession and the public, that our knowledge of the means of prevention, by vaccination and revaccination, be brought out and spread abroad. The following general conclusions may be regarded as tolerably well established by observation and experience:

In many persons a single vaccination is an effectual protection from Small Pox through life, whilst in others it appears to "wear out," to a greater or less extent.

Persons are very seldom attacked with Small Pox within five years after vaccination.

The age most liable to the disease is from 15 to 30 or 35 years.

When an epidemic influence favorable to Small Pox prevails, one person at this age out of every four or five exposed to the infection, will take the disease.

While Small Pox in the unprotected is fatal in at least one-fourth the cases, it is so modified after vaccination as to cause death in only one case out of fifty, or perhaps a hundred.

Inoculation is a surer protection than vaccination; but persons taking the disease after inoculation have it more violently.

Vaccination will not take a second time, to produce a *genuine* vesicle, in more than one case out of 80 or 100. And even then the vesicle is apt to be small and the scab thin.

Revaccination will always produce *some effect*, if the matter be recent and genuine. The arm may itch for a day or two, and the irritation vanish; or it may proceed to swell and fester, remaining sore for several days; or it may progress still further, causing much inflammation and often fever, being as severe as the genuine vaccination, and even more so.

The effect of revaccination depends much on the manner of performing the operation. If the virus be tucked into the skin with two or three small punctures, it will not cause much of a sore, unless the system be susceptible, in some degree, to the true cow pock. But if the skin be extensively scratched or abraded and the virus applied, it will nearly always make a severe sore, which may be nothing more, however, than a poisoned wound.

If the vaccination inflames and becomes sore in less than a week, it is spurious.

Though revaccination produces nothing more than spurious, irregular and imperfect vesicles or pustules, yet it appears to act on the system so as to protect it from the Small Pox.

When the Small Pox makes its appearance in a city or neighborhood, and shows a tendency to spread, every person, between 15 and 40, who is exposed in the street or in his business, should be revaccinated. This epidemic character of the disease is not apt to occur more frequently than once in five or six years.

When an individual is seized with Small Pox, every person, old or young, residing in the house, or frequenting it, should be immediately vaccinated. This has been my invariable practice—in Wilmington, Delaware, where the disease prevailed, extensively, in 1828; in Philadelphia, where it was slightly epidemic, I think in 1847; and in San Francisco, where it prevailed about nine years ago; as well as at other times, when occasional cases occurred. *I have never known a single instance* of the disease spreading or being contracted by a second member of the family, when this precaution was adopted.

The production of a sore arm by vaccination is no proof that the individual could have taken the Small Pox. Persons over forty years of age, who are generally secure from this disease, will take the revaccination in the same manner as those who are younger.

Some individuals will never take the vaccine disease, though the operation be repeated year after year. They possess a natural exemption. Experience shows that these persons are also exempt from Small Pox.

It often happens that children will not take the vaccination at one time, owing to some peculiar condition of the system. But, in a few months, a change takes place, and they become susceptible of the disease. If it be repeated, year after year, without success, the individual is regarded as exempt for life, both from the cow pox and the small pox. These natural exempts may be about one in a thousand in the population. I have lately vaccinated two individuals, both of them heads of families and near the age of thirty, who had been vaccinated, in past years, again and again, without effect, and yet who took the cow pock in its genuine form in my hands. These were, to me, anomalous cases. One of them, a lady, had nursed persons with the Small Pox, and resisted the infection. It is quite probable they would both have taken the disease at the present time, if exposed to it.

I am aware that some physicians consider the genuine cow pock to result from revaccination in a much larger proportion of cases than above stated. But I think a rigid inspection of the arm will show that the sore is wanting in some of the characteristics of the true kine pock. It may be a pustule instead of a vesicle—it may lack the central depression—it may not present the *regular* areola. The sore may approach very nearly to the genuine disease, and yet be imperfect or spurious.—*San Francisco Med. Press.*

CASES OF REFLEX AND INFANTILE PARALYSIS.

(*Under the care of Dr. Brown-Sequard.*)

In closely contrasting the cases of paralysis under the care of Dr. Brown-Sequard, it is observable that in all the great number of cases which come under treatment by that physician, he rarely fails to detect indications of paralysis of both sides of the body. It is very common to read, to hear of, and even to see, cases of so-called paralysis of one arm or of one leg, or solely of one side of the body; but the accurate tests which Dr. Brown-Sequard applies almost invariably bring out proofs that parts of the body on the other side also participate. The universality of this observation has an interesting bearing upon the physiology of the brain, since it seems to point to the fact that there is no complete decussation of the brain-fibres, but that some remain to be concerned in the innervation of the same side of the body. In the treatment of paralysis, Dr. Brown-Sequard first ascertains by the proper inquiries

whether the disease was originated in the membranes or the substance of the nervous centres, and then proceeds to limit the diagnosis to the precise point and special character of the lesion. Iodide of potassium is a remedy largely and usefully employed here. Local blistering, the ferro-citrate of strychnine, together with blood and nervine tonics are the other most common remedies. Amongst the most interesting are the causes of reflex paralysis, of which the study opens up comparatively a new field of observation, and suggests therapeutical resources fertile and good.

A remarkable case seen last week was that of a child who was stated to have "caught cold" eighteen weeks before, and who was the subject of a reflex paralysis of the eyelids and of some of the muscles of the eye. There was ptosis, prominence of the ball, and incapacity of abducting or adducting the eye, or of executing its rolling movements. Here, then, there was paralysis of the third, fourth, sixth, and seventh nerves. It was certainly reflex, for the iris was contracted firmly, so that one branch of the third was irritated and not paralysed. Any central cause which must have operated by causing pressure both behind and in front of the pons Varolii must, indeed, have been of considerable magnitude. But the cause was evidently reflex. The treatment advised was iron with minute doses of strychnine, and to be carefully watched; local Faradization, or the local application of heat by cloths to the surface.

In such a case, accurate diagnosis is the main step to cure. In investigating the cases of paralysis amongst children, Dr. Brown-Sequard points out occasionally the evils which have accrued from the application of term infantile paralysis to the paralytic affections of children, as though they were of one generic kind, and to be treated on a uniform general principle, and apart from the varied forms of paralysis seen in older persons. Dr. Brown-Sequard also sometimes points out cases of paralysis arising from a very wide range of differing causes almost as great as that in the case of adults. In one child it has followed an eruptive fever, and is the result of a sudden effusion into the ventricles of the brain; in another, the child is observed to cry out at night, to start in his dreams, and to raise his hand to his head. Here tubercular meningitis may be looked for. In a third, peripheral irritation may be discovered. These distinctions are of the utmost importance in treatment; and, before any course is undertaken, it is necessary to make out the cause and character of the paralytic affection.—*London Lancet.*

EDITORIAL AND MISCELLANEOUS.

Researches and Observations on Pelvic Hæmatocele. By J. Byrne, M. D., M. R. C. S. E., Resident Fellow of the New York Academy of Medicine, &c. Monograph. From the Author. 1862.

For this well written pamphlet which contains the most complete and perspicuous *resume* of the subject we recollect to have seen, combined with original observations of an important character, we return sincere thanks to the author. It fills a hiatus in American medical literature which in the author's words, for the honor of our progressive science, should no longer exist. About thirty years since, Prof. Recamier, first among the moderns at least, discovered and described this somewhat rare form of pathological lesion. Velpeau, Tilt, West, Bedford, but especially Nelaton, have since contributed from their experience, and occasional articles on the subject have appeared from various pens.

The author prefers the nomenclature Pelvic h. to " recto-uterine," " retro-uterine," or " peri-uterine," " as the extravasated fluid does not invariably select either of the locations thus indicated," a case illustrative of which proposition is given.

It occurs most frequently between 25 and 35 years, when the sexual system is in its greatest vigor, and consequently the pelvic organs more prone to congestion. Does not depend merely upon disordered menstruation, but upon some pre-existing lesion. He thinks that 80 per cent. of the recorded cases have depended on ovaritis resulting in a varicose condition of the blood vessels, softening of the tissues, &c., ultimately terminating in rupture and extravasation.

We are particularly pleased here by a suggestion in a foot note: "Varicosity of the veins may undoubtedly be a cause, as well as a consequence, of ovarian inflammation—perhaps the former more frequently. If so, would not the term *Ovarian Phlebitis* more correctly express the actual state of the parts affected?"

The pre-disposing and exciting causes are:

"1st. Inflammation of the uterine appendages and its consequences, oftentimes the primary, and by far the most frequent among the *predisposing causes* of pelvic hæmatocele. (2d.) Habitual constipation of the bowels, and morbid growths interfering with the free return of venous blood, and thereby producing a varicose condition of the vessels. (3d.) A hæmorrhagic diathesis from a disordered state of the blood. (4th.) Tubular, uterine, or vaginal occlusion, obstructing the normal secretion or giving rise to regurgitation through the Fallopian tubes. The immediate or *exciting causes* may be, (1st.) Sudden suppression of the menstrual, or a hæmorrhoidal discharge; (2d), tenesmus or violent muscular exertion; (3d), injuries by a fall or otherwise, and (4th), excessive coitus, and mental emotions tending to active congestion of the internal organs of generation.

Still another cause remains to be mentioned which might, with propriety, be classed both as predisposing and exciting, namely, *extra-uterine pregnancy*."

Then a general summary of the prominent symptoms:

"When the hæmorrhage takes place from the under surface of the ovary, or within the folds of the broad ligament, the patient, having previously suffered more than usual from pain in one or other iliac region, will complain suddenly of severe cramp in the lower portion of the bowels, accompanied or soon followed by tenesmus, and weight referred to the loins and sacrum; there may be painful and difficult micturition, and if the quantity of blood poured out be great, faintness, and even complete syncope may now take place; the skin assumes a pale or sometimes anæmic hue; the extremities become cold, the countenance anxious, pulse small and frequent, and the abdomen tympanitic, and very sensitive to pressure, particularly over the seat of the rupture. At this stage of the case, a vaginal examination will rarely fail to detect a tolerably firm and irregular tumor, somewhat painful to the touch, and situated directly behind, or to either side of the uterus."

The Diagnosis is stated to be, in many instances, extremely difficult, such acute observers as Malgaigne and Nelaton, each having reported cases of their own error. Nevertheless, in general, it can readily be made out.

The principal diseases with which it is liable to be confounded are pelvic abscess, retroversion of the uterus, dislocated ovarian cysts or fibrous tumors, extra-uterine fœtation, and possibly purulent collections. The methods are well described for avoiding mistake.

The treatment should be three-fold—*preventive*, *palliative*, and *curative*—preventing or removing the causative lesions, palliating by general and local measures according to the indications, and lastly removing the local affection. The author is evidently in favor of early puncture of the cyst by the trochar, and free evacuation of its contents, although he admits they may occasionally be absorbed spontaneously, or under the use of the ordinary methods—counter irritation, the internal use of iodine, murcury, &c., rest in the horizontal posture, and strict attention to the state of the bowels. He suggests puncture through the rectum as the most eligible, for what appear sound reasons, at least in the case given :

"(1st,) The posterior wall was thinner and more dependent; (2d), there seemed to be less danger of wounding branches of the hæmorrhoidal or other arteries—no pulsations having been noticed on this surface of the tumor; (3d), the discharge, if long continued, would be less disagreeable to the patient; and, (4th), when spontaneous evacuation of the cyst takes place, it occurs more frequently, and with no less favorable results in this locality than in the vagina."

The propriety of leaving the canula in the opening must be decided according to the place selected for puncture, its degree of tenuity or of thickening and infiltration—the cardinal principle being to secure free evacuation, with as little discomfort as possible to the patient. Examination of the recorded cases fails to convince the author either of the safety or utility of the injections usually recommended. The cases where it may become advisable are exceedingly rare.

Repeated punctures may be necessary, and he italicizes the proposition: "*I am fully satisfied that, in a retro-uterine hæmatocele of any considerable magnitude, it would be safer to penetrate the tumor twenty times than to 'always rely on absorption.'*"

The pamphlet, which our space will not permit us further to follow, concludes with remarks upon the frequency, causes, seat, and dangers of the disease. Four-fifths of the cases occur in married women. It is relatively, according to Prof. Simpson, more dangerous than pelvic cellulitis, but the author justly observes that these widely diverse affections ought scarcely to be associated ætiologically, as the remark might suggest. "*Encysted bloody tumors within the peritoneal cul de sac are extremely rare, those occupying the structures external to that membrane constitute the great majority*—say 75 or 80 per cent. of the whole." The diagnostic signs of the particular location unfortunately are unreliable, for "although a lateral position of the tumor will always indicate its subperitoneal character, yet the fact of its being central and occupying the whole posterior part of the vagina, does not, by any means, prove the contrary; and, secondly, that the position, size, or shape of the swelling—though *if intra peritoneal always central* both above the brim as well as in the vagina—possesses but little, if any, value in differential diagnosis."

We must refer our readers to the monograph itself for further details, commending it to their careful perusal.

Advice to a Mother on the Management of her Offspring. By Pye Henry Chavasse, F. R. C. S. E., &c., &c. "Lo, children and the fruit of the womb are an heritage and gift that cometh of the Lord." Reprinted from the sixth London edition. New York. Bailliere Bros., 440 Broadway.

This is a little volume of 175 pages, the remarkable popularity of which in England has led to its republication in this country. We suggest to the enterprising publishers that the value, interest, and permanent importance of this volume

warrant a more durable enclosure than a paper cover. It should be in the hands of every mother, and be carefully read, re-read, and conned.

The three sections into which the treatise is divided, discuss, in the catechetical form, the management of Infancy, Childhood, and Youth. Having carefully examined the author's directions, we find them eminently judicious and sensible. The physician will be the means of great good to the families under his charge by seeing that they are put in possession of this manual. There are here and there points which we are disposed to disagree with, but taken together we find little to qualify the general commendation above given.

Medical Testimony in regard to the proper Medical Treatment of Joint Diseases. Henry G. Davis, M. D., 19 Park Avenue, New York city. Pamphlet. From the Author.

The object of Dr. Davis in the publication of this pamphlet is two-fold. First, to lay the mechanical part of the treatment before his brother practitioners, and, second, to establish his claim to the honor of its origination. "On the last point," he remarks, "that while in this country a medical fellow-townsman quietly misappropriated, without acknowledgement, the apparatus that I had freely made him acquainted with—in England there are two men fighting, even now, over the same apparatus, each claiming its invention prior to its introduction by the other, whereas, in fact, both have borrowed it from me." It appears subsequently in the paper that Dr. Lewis A. Sayre is the "fellow-townsman" alluded to. Dr. Davis adduces the testimony of Prof. Alfred G. Post, Dr. Gurdon Buck, Dr. John Watson, Prof. Raphael, Prof. Henry H. Smith, Dr. O. C. Gibbs, Dr. Parker, and others, as fully establishing his priority over all others, and especially claims to have shown and explained the apparatus to Dr. Sayre personally. His point seems pretty clearly made out.

Aside from the priority question, the pamphlet is interesting as containing diagrams of the apparatus, and plates illustrative of its successful use.

Hand-Book of Surgical Operations. By Stephen Smith, M. D., Surgeon to Bellevue Hospital, New York. Bailliere Bros., 440 Broadway.

This is a small octavo of 279 pages, with a flexible cover, adapted for the pocket companion of the military surgeon. From the observation we have been enabled to give it, we do not hesitate to say that it is the best adapted to its object of any work we have yet seen. It is truly wonderful, the amount of valuable information the author has contrived to get into this compact space.

The work is divided into six chapters, the first treating of minor surgery, including the titles, Instruments, Union of Wounds, Dressings, Hæmorrhage, Bloodletting, Counterirtants, Vaccination, Anaesthetics. The second chapter treats of the Wounds and Ligatures of the arteries: the third, Wounds of the Veins, and Varicose Veins: the fourth, amputations: the fifth, of Resections: the sixth, of Gun Shot Wounds, &c.; closing with a copious index.

The feature of the work is its profuse illustration, which saves at a glance pages of description. Single instruments, pocket cases, field cases, brigade cases, bandages, ligatures, incisions, and special operations—about everything is thrown into practical form which the eye can take in at once.

So far as we can judge from hasty perusal, the Author has been very fortunate in the text, elucidating the details of each part with clearness and precision.

We cordially recommend the work to our military compeers, and indeed to practitioners generally.

The war is producing something of the effect upon medical and surgical literature that the magnetic telegraph is upon general writing—great and steady condensation, with consequent increase of pith and force. Knowledge is being divested of its cumbrous and disfiguring wrappings and disguises. As Bacon wished, it is being digested to aphorisims. It will not do in these days, when a man has conceived a dozen or so of ideas, to straightway fall to making a big book about them;

the greater part borrowed from those gone before, a dozen pages his own, and the rest rhetoric—all that has gone by. There *is* a beautiful statue in the great boulder of medical science, and skilful mallets and chisels are fast clipping their way down upon it.

A Manual of Medical Diagnosis: Being an analysis of the Signs and Symptoms of Disease. By A. W. Barclay, M. D., &c., &c. Second American from the second revised London edition. Pp. 451. Philadelphia: Blanchard & Lea, 1862. From the Publishers.

In the preface to this volume, the author states: "The very early period at which a call has been made for a second edition of this manual, has prevented my attempting anything in its revision beyond verbal alterations and minor additions; in its plan and details the work remains the same."

Most of the readers of this Journal probably already have "Barclay's Diagnosis" in their libraries—to them we need say nothing. But if there be one so unfortunate as not to have it, we most earnestly advise him to possess himself of the work at the earliest moment.

We know of no book which can supply its place, either to the old or young practitioner. Many a knotty case will be cleared up on reference to its pages. For perspicuity and precision, for conciseness and condensation, it is a model among medical books.

In these days of "general principles"—under which term too many shelter themselves whilst failing to ascertain precisely what is the matter of the patient under treatment—it is refreshing to read a treatise which makes want of exactness in diagnosis the next thing to criminal. For "where knowledge is a duty, ignorance is a crime." To ascertain what is really the matter of the patient, is the first great "general principle," to which all others are subordinate, a fact which we regret to say we see every day lost sight of. It is the very text of the sermon, which once being thoroughly understood,

the "secondlys, thirdlys, fourthlys, application and improvement," follow almost as a matter of course. Remedies abound, and "the cry is still they come," an infinite host like the sands of the sea shore or the stars of heaven in number. And the tendency all the time is to begin at the wrong end of the matter. We are hunting for antidotes and specifics and what-not, with about as much wisdom as Crusoe would have manifested in coining moidores instead of sowing grain and breeding goats. We are filling a bottomless pitcher with new remedies, as the Homœopathists are filling infinity with infinitesimals. It is time to begin again, and if we are to take our pitcher to the fountain of Hygeia, let us see to it that we get hold thereof by the right handle. Diagnosis—diagnosis, *iterum*, *iterumque*, that is the thing. If we would have successful treatment any thing more than a lucky accident, this first standpoint must be gained. When Light first was, then the world and man and all animals and plants and trees were sure to follow. Without the *Fiat Lux!* these others were problematical.

For this reason we hailed the first edition of "Barclay's Diagnosis" with feelings much more akin to rejoicing than we did ———'s great volumes on Practice. Because Dr. Barclay seemed to give us the *pou sto*, with a chance to use the lever. The big volumes—chaotic, "dry rubbish shot here," with much confusion of "what is the matter"—pelted poor patients in the darkness with all sorts of missiles, many of them, even in the light, of most questionable shape.

Briefly, Dr. Barclay's work is altogether invaluable—at all events worth whole shelves of speculative treatises, and sundry dozen volumes of descriptions of wondrous drugs thrown in "to boot."

We would not be understood as undervaluing medicines or disparaging their use. Not in the slightest degree. The army should be thoroughly disciplined in the use of their weapons, and should be provided with all reasonable ammunition, but it is scarcely worth while to charge bayonet at the

winds, or burn powder at the ocean waves. The whereabouts of the enemy, his strength and arrangement of his forces must first be ascertained, and then don't, after the expectant quasi homœopathic style, fire pop guns at the elephants and squibs at his iron mailed men of war, or on the other hand, in "heroic" fashion, touch off hundred pounders at fleas, and explode magazines under bubbles.

Whatever may be the facts at present with reference to Therapeutics, there is no good reason why Diagnosis may not approximate an exact science, and of this patent truth the present volume is an unimpeachable witness. The greater portion of it is, beyond debate, upon the level of true science. Many particulars still remain to be cleared up—as in other sciences. But as a clear headed, sagacious, intelligent, and faithful guide, we commend Dr. Barclay in the strongest terms.

Etiology of Phthisis.—Dr. Henry J. Bowditch, President of the Massachusetts Medical Society, in his recent Anniversary Address, enunciates, as the result of prolonged and arduous investigation, the somewhat startling proposition that the main influence begetting Phthisis, is *prolonged exposure to a damp atmosphere by continued residence in damp localities.*

To sustain this view, he adduces an "immense mass of statistical facts which he has collected from every town in the Commonwealth, and which were laid before his audience in a way to produce a most profound impression." "Some of the evidence offered," says the *Boston Medical Journal*, "was of the most surprising character; stamping upon certain portions of towns the deadly seal of the destroyer, and even attaching to particular houses an almost certain doom to the residents; and in every instance in immediate connection with the influences which, in accordance with this theory, are the principal cause." The editor confesses that in listening to Dr. B's eloquent exposition of his doctrine, he could hardly resist the conviction that his arguments were unanswerable. We coincide with his expressed determination to wait until the address

is in print and its doctrines be coolly and dispassionately examined. It must be admitted that there are serious difficulties, in the shape of matters of fact and common experience, in the way of speedy reception of this great generalization. The anniversary oration before the Massachusetts Medical Society is beginning to get sensational. We shall get to looking for that yearly festival and its utterances "with feelings of no ordinary emotion."

English, American, and French Hospitals.—The effort is being made in Paris to escape the unfavorable comments of the world with regard to the larger proportionate mortality of the French hospitals in comparison with American and English, by stoutly and plumply denying credit to the statistics of the latter. It is notorious that the English have done the same by the Americans for a long time.

M. Briquet, the French champion, says that he believes American statistics less than all the others. He illustrates the folly of trusting such evidence, by alluding to M. Malgaigne's remarks with reference to the Massachusetts Hospitals—"*Now*," says M. Briquet, "*there is not a town in America which bears that name!*" What *will* the "Hub" do about it?

Havelocks.—P. A. O'Connell, Surgeon 28th Massachusetts Volunteers, in a communication to the Boston *Medical Journal*, thus speaks of the noted "Havelocks:" "On the Potomac, last summer, they were found of some use in cleaning guns, indeed, but in most cases it is respect alone for the giver that prevents one from turning them to use in some such way—for they add to the weight of the cap, without adding to one's comfort. If they could be made so as to wear without the cap, they might become of some service."

It would seem that the poor Havelocks have had their day.

The Quinine Prophylaxis.—Drs. Gray, Homans, and Hodges, the surgeons specially detailed by the Governor of

Massachusetts to visit the army in Virginia, report to the State Surgeon General, and the following sensible remarks we extract:

"The diseases were principally of a typhoid character, genuine typhoid fever, typhoid pnuemonia, dysentery, diarrhœa, acute and chronic rheumatism. The type of all of them may be said to have been generally mild, in spite of the great fatigue, and, to many, exhaustion, from work in the trenches by night and corduroying the roads by day, with other labor incident to military encampments, and frequent exposures to long-continued, cold, north-east rain storms.

"*Malaria was said to be acting powerfully, and therefore quinine must be administered in large doses. The ill effects from this large dosing was found to be much greater than that from any supposed malarial influence. The improvement in every instance where the quinine was either entirely stopped or given in greatly reduced quantities, was too marked and too continued to leave a shadow of a doubt as to the exciting cause of the persistent head ache and diarrhœa. The good effects of stimulants, brandy or whiskey, was immediately seen, when we had some to give.*"

Is not this monstrous "quinine prophylaxis" nonsense about "played out?" The word of its promise is not even kept to the ear, and the humbug proves dangerous as well as expensive. We are thus every day becoming more thoroughly convinced (if it were needed) of the truth of the propositions we laid down upon this subject early in the war. Visionary theories will not abide the touch of experience and truth.

☞ *Williamsburg.*—It is estimated that there were some thirty or forty thigh amputations after the Williamsburg battle. Primary amputations have proved more successful than secondary.

The Military Department.—Some little matters about the medical department of the army seem to demand a change. Thus, Dr. A. H. Baker, editor of the Cincinnati *Medical and Surgical News*, writes to his Journal from Pittsburg Landing, April 13th:

"We arrived here about 10 A. M. to-day, and in less than thirty minutes, witnessed an amputation at the *shoulder joint;*

the operation was performed by a surgeon on one of the boats from Cincinnati. The poor fellow will only enter the portals of eternity a little earlier than if he had been permitted to fight his last battle undisturbed. I make this remark because I have been over the field of battle, and have seen enough to convince me that our success with the knife, at this period, must be a failure, and for one, I am determined to depend upon *conservative surgery* as affording the best chance for *life*, and, surely, for *limb*. I am fully satisfied that many of the brave men who have been wounded in battle since the commencement of this unholy war, have been sacrificed upon the altar of a mistaken ambition for fame, as an operator. It does seem that the soldier is a legitimate subject for horrible abuse, that the moment he is entitled to the name, he becomes a soulless mass of animal matter, only fit to be shot at, and when he escapes death from the immediate effects of the minnie and starvation, he can find it under the knife of the *surgeon;* if such we can call the man who is willing to lay down the advantages of a scientific education and take up the character of a worthless tyro, or a paid demonstrator. But, Doctor, I do not wish you to misunderstand me, and to suppose that I have reference to *army surgeons*, for, my dear sir, they have been outrageously abused by the press, and that, too, without a knowledge of the situation in which these men are often placed. Let me illustrate by the facts which present themselves here. On Sunday the 6th, the Confederates took possession of all our stores, and after the battle was ended, our surgeons found themselves without the necessary means for effective treatment, and thus the wounded were, in many instances, neglected until a *new set*, with supplies and ready hands, made their appearance to try their skill and to witness the result of *secondary* amputations, to which my remarks, at present, refer.

One thing more presents to my mind a horribly mistaken philanthropy; it is the *removal* of the wounded from the field of devastation. The whole thing is wrong, and comes in as the *finishing stroke*. Behold a man severely wounded, a bone broken, much exhausted, and just in a condition to convalesce, with care; he is just taken up by *carriers*, and on his way to the boat. Hear him complain at every jar, and see him nearly fainting when laid upon deck; here he must undergo various processes, such as washing, dressing, etc., etc., all done in a hurry, no time to wait; then he is *fixed* upon the boat for a trip, and is kept alive by stimulation until ready to start, when

he is again subjected to great suffering, as his constant moans will tell, by the shaking of the boat. But if he lives, his sufferings do not end here. When he arrives at our landing, then he will be again brought under the carrying operation, or some other, perhaps more dreadful, when, at last, he will be deposited in one of our military hospitals, there to end an existence rendered miserable by the mistaken kindness of a philanthropic people.

"The question may be asked, what shall be done? I am free to answer, build temporary hospitals on the ground, or near the battle field, and there let them be supplied with everything necessary to afford the best possible chance for recovery. By this plan, the cost would be less, and the attention better, for the reason that changes would be unnecessary; as it is, those under the care of physicians on the boat, must pass into other hands upon their arrival at the point of destination, which may result in change of treatment to the disadvantage of the patient."

The medication of the wounded and otherwise invalided soldiers, also requires reform. From the highest authority, we have it, that on one of the hospital transports this was the state of facts. The invalids having been received, they were put under the care of the medical gentlemen on board, and a well known physician and apothecary of this city was detailed to dispense the medicines. Curiosity led our informant to look over the first prescriptions sent up to the dispenser. It is a positive fact that of the first twenty-eight, *ten* contained Hydrarg. Subchlorid and Pulv. Ipecac comp.; ten contained Hydrarg. Subchlorid and Pulv. Ipecac, and eight contained Tinct. Verat. Virid. How long this continued he is unable to state, for at that point he ceased his investigation. To his credit, be it said, that he suggested to the apothecary the benevolent substitution of Carb. Sodae for the Hyd. Subchlor. and Brandy for the Verat. Virid.

We have hesitated before giving this humiliating record—for humiliating it is in the last degree. There are some men who cannot distinguish an attack upon abuses from an attempt to overthrow. Some months ago, when we remonstrated in mild terms against the frequent salivations at Cairo, weak-

kneed and tender-footed gentlemen feared it might "hurt the profession" to have the facts known. When almost an entire transport load of salivated soldiers is received at once on the Tennessee, and such facts as we have given above are published, we suppose there will be another flutter among the birds. But it cannot be helped—"what we have written is written," and we have only put it down to denounce the enormity of the treatment. It is simply an outrage upon scientific medicine. It is just such things as this which have built up the fortunes of the quacks of every color and cognomen. We know a man in this city, calling himself a "regular physician," who used to teach parents to feed their children calomel on their bread and butter! The result has been that the *surviving* members of the families who once employed him, are homœopathists. About the last of his patients, to our own knowledge, was murdered by the same *infernal* treatment, not two years ago. And those who cultivate medicine as a science, and endeavor to practice according to its precepts as such, have to share the odium which these excrescencies, or worse, upon the medical body bring upon it. Medical societies and associations may pile their constitutions and codes heaven high, and yet not escape the effect.

We have, on good professional authority, been informed that in one camp, which has numbered its thousands, the general direction given by the ranking surgeon was that, whenever a patient's tongue tended to become dry and red, he should at once be given *Donovan's Solution*, in large doses. This was the sole test and criterion of judgment. The mortality bills at that post were high, but it is believed that we shall have some statistics with reference to the power of that peculiar specific, by and by—showing that of the many who took it, some recovered, and thus a new leaf in medical arithmetic.

It seems to the writer about time that this sort of thing should come to an end; and the way seems clear to the accomplishment of that desirable result.

The army and navy must have educated medical attendants,

for the lives of soldiers and sailors are of immediate necessity for the preservation of the honor and existence of the nation. And the medical man must be educated and instructed up to the level of the times—for Medicine has progressed at an equal step with other sciences, and the man who does not keep step with it, must fall into the rear. It is no discredit to the great medical army to say that its infirm members and valetudinarians are behind. These invalids must "post up," or take the consequences. The time has come when a man can no more cover up his ignorance under his profession than, as we have elsewhere observed, under his nationality—he must stand or fall according to his knowledge, and power of applying that knowledge to the business in hand. All surreptitious props must sooner or later fail. The war is pulling down several.

Acute Tropical Dysentery.—In the *Edinburgh Medical Journal*, Dr. R. W. Cunningham, Assistant Surgeon to H. M. 4th Bengal Europeans, records his experience in the use of Ipecacuanha in larger doses than those ordinarily employed in the treatment of dysentery. His plan is on admission of the patient, to apply a large sinapism over the epigastric region, and then exhibit thirty minims of Tinct. Opi., to render the stomach tolerant of the remedy. Half an hour or an hour afterwards, from a drachm to a drachm and a half of powdered Ipecacuanhais given at once. It produces considerable nausea, but rarely vomiting, although the latter may occur under one or two hours afterward. General sedation results, and a copious perspiration breaks forth. The countenance loses the expression of suffering; the tenesmus and abdominal pains subside, the stools are lessened in frequency or cease for twelve or twenty-four hours; the pulse become full and soft. A considerable degree of languor and depression naturally follow, but the next evacuations are unaccompanied with tenesmus, free from blood and mucus, and hold in suspension small masses of fœces. A repetition of the dose may sometimes be necessary. Chicken broth and arrow root are

the only diet allowed. If any tendency to debility is subsequently manifested, a few doses of Infusion of Chiretta with Nitro-Muriatic acid are sufficient to complete the cure.

The *rationale* of the process is sufficiently clear, and the writer's exposition does not require repetition. He states that relapses are less liable to occur than after the other methods of treatment adopted in the army. He suggests this method as peculiarly valuable at the outset of the disease, and as army surgeons have this advantage over practitioners in civil life, that they can take the disease under treatment in its first stage, it is especially valuable to them.

We may remark that several of our correspondents in the army, who have tried this *old* practice, speak very highly of it, but say that neither Ipecacuanha nor any other medicine they have found will prevent the return of abdominal disturbance in those who persist in the constant violation of the most simple and well known rules of health. One surgeon, almost with tears in his eyes, confessed that the leathery meat fried in tallow, and half cooked beans, would make his men sick notwithstanding quinine prophylaxis, and the swallowing of fragments of hard bread, as ostriches do nails, to favor digestion.

About "Nationality."—A correspondent from the seat of war, a month or two since, took occasion to reprehend the inefficiency or ignorance, or both, of one or two medical men, at the time in charge of a hospital transport on the Tennessee river. It happened that the aggrieved individuals were foreigners of a particular "nationality." We believe our correspondent spoke of them as "Dutchmen"—precisely as he would have spoken of them as Frenchmen or Yankees, if they had happened to be scions of either of those nations. By a dodge, adroit enough for a slippery politician or wily lawyer, the army doctor has slid under the cover of his "nationality," and discharges upon us and our correspondent a hat full of wrathful *Deitsch* expletives through a German paper in this

city, among which our limited acquaintance with the language enables us to detect "KNOW NOTHING" in startling prominence.

We beg leave to assure our indignant friend that the cuttle fish plan will not work. Like the ostrich, he may hide his head (under his nationality if he chooses,) but he cannot hide that other prominent portion of his person, which on the occasion alluded to by our correspondent, was so liberally displayed.

No man surpasses our correspondent or the editor of this Journal, in respect and admiration for the German nation, its magnificent attainments, its profound scholarship, its gigantic intellectual labors. The world could not spare Germany, and the great thoughts, which move the race so wonderfully at the present day, owe their development more perhaps to the German mind than any other. But we shall enter into no needless panegyric. Among our subscribers, and among our personal friends, we are proud to reckon scores of that nationality, who in every thing which characterizes the high minded professional gentleman and accomplished scholar, "are first among their equals," of any nationality.

We simply toss back the epithets so lavishly scattered by this army surgeon, (Heaven save the mark!) as totally inapplicable in our case—the coat fits in no particular. Our educated German friends have not the slightest desire to have ignorance and pretension covered by their nationality.

It seems this army doctor's horse stumbled and sprained the rider's ankle, which, although it did not prevent the doctor's walking with scarcely a limp, does enable him to assert that he is suffering from wounds received in the defense of his adopted country, and to a certain extent prevents his emptying the remaining full vials of his wrath upon our correspondent's devoted head. We await with trepidation his recovery from his *wounds*. Meanwhile let him ameliorate the tedium of his hours whilst awaiting convalescence, by ruminating upon this—our correspondent assures us that he is prepared to prove his former statements, and, if necessary—*more too*.

We candidly advise our wrathful friend to be content with

the laurels he has already won, and allow our friend, the ex-Governor, the use of his valuable columns for more profitable news or discussions.

Carbonate of Ammonia in Scarlatina.—Dr. Spooner, in his very sensible essays, to which we alluded last month, observes with reference to the great claims made for Carb. Am. in the treatment of Scarlatina, (referring particularly to Dr. Peart's work,) that there is no doubt a valuable truth contained in the accounts put forth, but, unfortunately, the statements are too extravagant, too unqualified, and allowing no exceptions. We extract the following, as containing sound thought as well as practical directions with reference to this particular agent:

"During many years of extensive practice among children, we are assured there was no death; in hundreds of consecutive cases, in every *form* and *stage* of the disease, the ammonia was given with uniform success. Thus the account promises too much, more than can be realized. It promises more than can be realized from any known remedy. We have no remedy of which it can be said, it will never fail. Vaccination does not always prevent small pox; opium does not always relieve pain; mercury does not always cure syphilis; nor does cinchona always cleanse the system of the miasma of intermittents. All that we can say of any medicine is, that it is useful, and the best we have for a specified purpose. If, encouraged by the early accounts of this medicine, a physician should be induced to use it, there is more than an equal chance that he will be disappointed; not, however, from want of power in the medicine, but, as I shall presently show, from a want of knowledge of the proper way of using it. Thus, as it too often has been, these physicians, in their earnestness to recommend a valuable medicine, did much to prevent a fair trial of it by others.

Another reason is to be found in the qualities of the medicine itself. Ammonia is a difficult medicine to give to children; and often requires much decision on the part of the physician and energy on the part of the nurse to secure for it a fair trial; and when there is ulceration in the throat, it is impossible to give it. This difficulty is a serious obstacle to the use of this remedy, especially in the hands of physicians

who are skeptical in regard to the benefit of any medicine in scarlatina.

A third reason is to be found in the different ways of using the ammonia by different physicians. This is the most important reason. Indeed, this is the chief cause of the difference of opinion among physicians in regard to the value of many medicines. Different physicians use the same medicine in different doses; or they give it in *different stages* of the same disease, and very naturally come to different results. The right stage for giving a medicine is a matter of quite as much importance as the size of the dose to be given. It may require many years after a medicine has been brought into notice, before the precise limits of its usefulness can be defined —or the best way as to form and quantity of administering it, or the right stage for giving it, shall be determined. In the mean time, there may be every variety of opinion in the profession as to its usefulness. A striking example of this can be found in the history of cinchona as a remedy.

The bark of cinchona was first brought into notice as a remedy for fever and ague by a physician in 1632. For a series of years it encountered the prejudice of the profession, and, it is said, it would have fallen into oblivion had it not been for the activity of the Spanish Jesuits. Given to the Arch Duke Leopold, of Austria, at the commencement of the cold stage of an intermittent fever, it produced little or no effect, and consequently it was declared to be useless. Given to an alderman of London, and he died while using it, and it was condemned as a dangerous medicine. Oliver Cromwell was sick with fever and ague, and languished and suffered and died from it; and his physician was afraid to use the bark in consequence of its dangerous effects in similar cases. At length Sydenham, who was at first opposed to its use, candidly watched its effects, became convinced of its power, determined the quantity and frequency of its dose, and that the time of giving it was between the paroxysms, and not during them, as had been the practice.* Thus it appears that a valuable remedy may fail from error in using it. This remark is applicable to the carbonate of ammonia in scarlatina. Physicians have given it without knowing how it should be given, and consequently have often failed to obtain good results from it.

In using the subcarbonate of ammonia, there are three rules to be observed:

1. Give it as early in the disease as possible.

* Good's Study of Medicine, Vol. II, p. 130.

2. Give it in as large doses as the patient can bear, and repeat it every two, three or four hours, according to urgency of symptoms.

3. Continue it until there is improvement of the symptoms, which can usually be seen on the second or thir day.

The first rule is of paramount importance. I am confident that some physicians have failed in the use of ammonia, from not observing this rule. With our present knowledge, we cannot define the limits, as to time, of the usefulness of this medicine. So far as I have observed, its effects have been most striking when given at the very onset of the disease; and in a few cases, when forty eight hours had elapsed before commencing the use of the medicine, I have seen no benefit from it.

The usual dose of the medicine is from three to five grains, given in simple syrup, or in water saturated with sugar. There is a serious difficulty in regard to the dose of this medicine, owing to a great difference in the article itself, as received at different times from the apothecary. When first made, the subcarbonate of ammonia, or, as the chemists call it, the sesqui-carbonate of ammonia, is solid and semi-transparent, giving a strong smell and taste of ammonia. On exposure to the air, it effloresces, and is converted into a bicarbonate, losing its ammoniacal smell and taste. In its first state it is too pungent; and if kept too long, it *may lose* its specific power. The article that I have used, has had the smell and taste of ammonia, but not so strong as to render it difficult to swallow.

As to the third rule, I have seen decided improvement in little more than twenty-four hours, when less than 30 grains had been given; and I have continued its use until more than two drachms have been taken. Improvement in most cases will take place on the second or third day, when the medicine has been given early on the first day of the attack. In one case, in which the medicine was not commenced until the second day, it was continued through five days, and with decided benefit. At one time I thought that the smell of the ammonia in the urine might be taken as an evidence that it had produced its specific effects upon the system. In several cases this odor has been well marked, and has compared in time to the improvement in the symptoms. But subsequent observations have persuaded me that improvement often takes place without the ammoniacal smell.

It has not been my practice to give the ammonia in cases

which at the beginning were mild; although I have sometimes had reason to regret this course, in consequence of these patients having suffered from troublesome sequelæ, which the ammonia would have prevented.

The patients to whom I have given this medicine, have, for the most part, presented the following symptoms: Convulsions, or distressing vomiting, with anxiety, prostration of strength, and quick pulse. Convulsions almost uniformly usher in cases of a violent character; the other symptoms mentioned are usually precursors of severe cases.

Deodorizing the Breath and Cleansing the Teeth.—We find the following formulæ, which may prove occasionally convenient, in the *Druggist's Circular*. It is important that the Hypochlorite of Lime employed should be fresh and good, coming up to the standard of the pharmacophœia:

Dr. Angelot's Preparations.—The following preparation has been employed by Dr. Angelot, of Briancon, in the treatment of ulceration of the gums, a very frequent complaint with soldiers: Take of hypochlorite of lime, from 10 to 25 grains: mucilage of gum-arabic, 1½ to 4 drachms; syrup of orange-peel, 1½ to 2 drachms. Mix thoroughly. This mixture is employed as a lotion to the ulcerated gums.

Pastilles of Hypochlorite of Lime.—Several formulas for the preparation of the pastilles have been successively published; these preparations have the advantage over those which are liquid, of being more easily transported.

First Formula.—Take of hypochlorite of lime, 7 drachms; sugar, flavored with vanilla, 3 drachms; gum-arabic, 5 drachms. The pastilles are made *secundum artem*, so as to weigh from 10 to 11 grains. Two or three of these pastilles are sufficient to remove from the breath the diagreeable odor produced by tobacco smoke. The pastilles thus prepared have a gray color, and become quite hard; if pastilles of a white color are required, the following substances are employed:

Second Formula.—Take of dry hypochlorite of lime, 20 grains; pulverized sugar, 1 ounce; gum tragacanth, 16 grains. The hypochlorite of lime is triturated in a glass mortar, and a small quantity of water is poured upon it; it is then left to repose, decanted, and a second quantity of water added; the two liquids are filtered, and the gum and sugar added so as to form a paste. This is divided into pastilles, weighing from

12 to 16 grains. If it is desired to aromatize the paste, one or two drops of any essential oil may be added; the oil should be added to the sugar and gum before the paste is formed.

Deschamps' Pastilles.—Take of dry hypochlorite of lime, 2 drachms; sugar, 8½ ounces; starch, 8 drachms; gum tragacanth, 1 drachm. carmine, 2½ grains. The pastilles should be made so as to weigh about 2½ grains; five or six may be taken in the space of two hours. By employing starch in the preparation of the lozenges, Deschamps wishes to prevent the yellow color which they would otherwise assume.

Deschamps' Dentifrice for Removing the Yellow Color from Teeth.—Take of dry hypochlorite of lime, ½ drachm; red coral, 2 drachms. Triturate well and mix thoroughly. This powder is employed in the following manner: a new brush is slightly moistened, then dipped in the powder and applied to the teeth. According to the author, a few days use of this powder will produce a marked alteration in the appearance of the teeth, which will acquire a white color.

Nitric Acid Fumes.—Two men, employed in a chemical manufactory at St. Denis, were found dead in the street soon after leaving their work. Their bodies were removed to the Morgue for examination. The medical opinion was that their death was due to the inhalation of the fumes of nitric acid. It is suggestive of further observations and precautions with reference to the large class of operatives in manufactories, telegraph offices, &c., who are constantly more or less exposed to the fumes of this powerful agent. It would seem that measures might readily be adopted to prevent deleterious or dangerous results.

Alveolar Abscess.—W. H. Atkinson, M. D., in the *Dental Cosmos*, writes that molecular degeneracy *must* precede all idiopathic formations of pus. In traumatic lesions where a foreign body is forced within the tissues, a kind of artificial abscess is formed, an exudate partially or completely encysting it, whence, if soluble, the foreign substance is gradually absorbed, or reduced to its smallest compass. If insoluble, and located not too near centres of motion or certain important

organs, it may remain inert—the abscess spontaneously cured without a rupture of the cyst. But when the molecular degeneracy is more extensive or pervading the cyst is less, or not at all defined, pus may burrow every where "around and beneath muscle, tendon, blood-vessels, and nerves, until the poor patient is literally one bag of illy formed pus and broken down adipose tissue, between the deep and superficial layers of fasciæ.

Cases of what is popularly called "ague in the face," are closely allied to this sort of molecular degeneracy, but recently induced by excessive fatigue, bad feeding, or deficient food, or food of poor quality, cold, or excess of indulgence in the venereal function, or depressing afflictions of the affections," and are very apt to be tedious and harrassing to patient and practitioner.

This degeneracy it is our first duty to correct by controlling the aberrant forces and restoring nutrition by better regimen and morale. General sedation of the main trunks of the vascular system, and local applications, cold, warm, or hot, to the tumefied face are recommended. These may prevent altogether, or at least localize, the formation of pus. When the abscess points, open it and dress it morning and evening for a few days with equal parts of pure creosote and tincture of iodine, gradually extending the time until the discharge resembles the white of an egg, then the treatment may be suspended, but the case should still be watched as relapses are not unfrequent. A bit of cotton, or of cork, spunk, or soft wood, on the end of a knitting needle, will be found a convenient means of dressing the cavity—leaving the pledget in the part. If the depth is miscalculated and the cotton projects, cut it off carefully, and apply over it, between the wound and the buccal walls, another pellet of cotton, wet in Tinct. Arnica, diluted with four parts of water.

When it is remembered how often these so often neglected abscesses lay the foundation of caries and even general necrosis, or other diseases of the maxillæ, it will be seen that

too much care can scarcely be exercised to prevent such disastrous results.

Cerebro-Spinal Meningitis.—Occasional cases of this fearful form of disease have recently appeared in this vicinity, and also in some parts of Iowa, Missouri, Kentucky, and Tennessee. It is not too much to say that any practitioner, who has passed through an epidemic of it, had rather encounter almost any other form of disease to which the human system is liable. Unfortunately, the diagnosis and morbid anatomy are much better understood than the appropriate treatment. The very best practitioners we have ever known, have had little reason to plume themselves upon their success with it. It is safe to say that its treatment is, as yet, as unsatisfactory as that of Asiatic Cholera—the results are, on the large average, even more fatal.

One error should be avoided—it is not allied in nature to *Congestive*, *Pernicious*, or *Malignant* "Malarious fever," as ordinarily described in the books or understood in practice. The "Pernicious Remittent" of Wood, and other authors, is as distinct from it as a severe summer diarrhœa is from Asiatic Cholera. It is not a less or more severe form of remittent, or intermittent, fever, but a totally distinct affection, and should not by any means be confounded with it. There may be chill, and coma or delirium in each, but it is the loosest possible observation and judgment that can be decided by these coincidences.

We do not propose to rehearse the symptoms or special diagnostic marks, as we could add but little to what the text books contain, but merely wish to direct the attention of the young men of the profession to the well defined distinctions between the two forms of disease, recently, we regret to say, most remarkably ignored by the published *decision* of a medical gentleman who had no right to commit so grave an error in diagnosis.

The Pernicious, Congestive, or Malignant form of Inter-

mittent or Remittent fever, although attended with the gravest symptoms and most dangerous without treatment, is most singularly amenable to the ordinary well known treatment, and *is readily controlled.*

Cerebro-Spinal Meningitis, on the contrary, presenting some symptoms in common with the foregoing, yet affords many strikingly distinct symptoms by which it may be positively diagnosed, and, as before remarked, is unfortunately one of the most intractable of diseases with which we are called upon to cope.

Climate of California in Phthisis.—Dr. James Blake, continuing his series of articles on the climate of the mountain ranges of California in relation to the treatment of Phthisis, has brought together a table of thermometrical observations which strikingly illustrate its advantages. The data go to show, however, that the climate is very diverse in different parts of the State. Thus, the climate of the Sierras very closely approximates that of the Sacramento valley, which is far less favorable as a summer residence for consumptive patients than that of the Coast Range. During the month of July, the most agreeable month for living in the open air, the range of temperature on the Coast Range was never below 57 deg., and never above 82 deg., with a variation during the twenty-four hours never exceeding 20 deg.

Dr. B. observes that the temperature is by no means the sole advantage, for together with this the atmosphere is dry and bracing, and the sky unclouded for months together. The last summer there was no rain from the beginning of May until the end of November, until which latter time his patients remained abroad. About the middle of September they began to descend towards the plain. The lower ranges offered a climate well adapted to the early summer and late autumn months. The highest elevation of the camp was about 4,500 feet.

Game is abundant, and thus the camp is well supplied. At

the coming on of the winter and rainy season, he advises patients to seek a similar climate to the California summer in the highlands of Mexico, which may easily be reached by steamers and sailing vessels from San Francisco via Mazatlan three or four times a month, and from thence by a short land trip of eighty miles they can gain the regions of perpetual summer. The country, he remarks, is well settled, and as large mining operations are carried on there by our own countrymen, all sorts of supplies can be secured. Dr. Blake concludes his paper by asserting his belief that in no other part of the civilized world can such favorable conditions be found for treating Phthisis as on that coast. That it cannot be cured by drugs, is a fact patent to the profession. That it can be cured by out-door life in the mountain air, is a fact of which he has seen abundant proofs, and which others in crossing the Plains have had opportunities of verifying. His own opinion is that a large proportion of cases of Phthisis will be found to yield to one or two years open air treatment, and to carry out that plan the California Coast Range is the best known locality.

Antagonistic Effects of Opium and the Mydriatics.—Several cases have recently appeared illustrative of the correctness of Dr. Lee's position in the paper on this subject in the American Medical Journal. Poisoning by Belladonna and Stramonium has been speedily relieved by the exhibition of full doses of Morphine; and *vice versa*, poisoning by opiates has been controlled by large doses of Belladonna. An incidental practical suggestion is, that it is scarcely worth while to mix these articles in the same prescription, provided it is intended to secure a decided result.

Iodide of Potassium.—The Times & Gazette remarks that Iod. Potassii is not only maintaing its reputation as an alterative, but really gaining in general favor. Although very valuable in rheumatism and in securing absorption of inflam-

matory products, it is yet the most strikingly beneficial in tertiary syphilis. The old bugbears—wasting of the breasts and testicles—are now never heard of, and *iodism* is certainly exceptional. Eight and ten grains are now with many an ordinary prescription. Dr. Gull and Mr. Paget strongly commend the addition of ammonia as enhancing its activity. Some surgeons combine it especially in brain and nerve disorders, with Tinct. Nucis Vomic.—it is asserted with great advantage.

Arsenic in Ophthalmia.—Mr. Critchett commends Arsenic in certain chronic forms of Ophthalmia, especially in young persons. It is chiefly useful in intractable cases of purulent Ophthalmia, attended by intolerance of light and a feeble and irritable state of the system generally. It may in these cases sometimes be well combined with iron, or the steel wine. For a child of five years, he orders a minim of the Liq. Pot. Arsenitis in a teaspoonful of the steel wine. Upon which suggestion we shall make no comment, but subjoin a *feu de joie* from Dr. O. W. Holmes:

The more you examine the structure of the organs and the laws of life, the more you will find how resolutely each of the cell-republics which make the *E pluribus unum* of the body maintains its independence. Guard it, feed it, air it, warm it, exercise or rest it properly, and the working elements will do their best to keep well or to get well. What do we do with ailing vegetables? Dr. Warren, my honored predecessor in this chair, bought a country-place, including half an old orchard. A few years afterwards I saw the trees on his side of the fence looking in good health, while those on the other side were scraggy and miserable. How do you suppose this change was brought about? By watering them with Fowler's solution? By digging in calomel about their roots? Not at all; but by loosening the soil around them, and supplying them with the right kind of food in fitting quantities.

Which we think hits that case, and some others, exactly.

Acupressure.—Dr. E. L. Cooper, in the San Francisco

Press, writes the obituary of this surgical humbug, so popular with certain journalists a couple of years ago. We predict a similar early death for a similar humbug, to relieve local pain, which has gained much eclat within the same period.

Ovariotomy.—M. Nelaton, finding this operation condemned on what appeared to him unsubstantial grounds by the French surgeons, recently visited England on the invitation of Dr. I. Baker Brown, to observe the results of his operations. He found that Dr. B. had performed the operation with marked success. His conclusions, as given by a correspondent of the San Francisco Press, are as follows:

1. In presence of mutilocular cyst, at its debut, before it has occasioned grave accidents, I should abstain from the operation. Because there are examples of the tumor remaining stationary for years, without causing even distress.
2. I should also abstain, in case of an old cyst, which has undermined the constitution of the patient.
3. I think the opportune moment to be, when the cyst commences to swell up rapidly, and the danger of serious accident is imminent. Then, and then only, would I operate.

Large Doses of Morphia.—Mr. Parish, of Philadelphia, having some time since called attention to the fact that Morphia is frequently given in much larger doses than formerly, the proposition was called in a question by another apothecary. The Druggist's Circular very properly observes: "The simple denial on the part of our other correspondent does not remove the fact that some doctors prescribe the narcotic in such doses, any more than it acquits a thief if he brings ten witnesses who have not seen him commit the crime against one who witnessed it."

What *does* the Circular mean? Are not such "comparisons *odorous*"—"very tolerable and not to be endured?" The way our contemporary puts the case annoys us, but of the fact there can be no question.

The reason is because physicians now realize that pain is

by no means salutiferous and should be put down: because it is found that many of the supposed beneficial effects of calomel and other drugs were really due to the opiates with which they were combined; because they have found, practically, that opium, or morphine, its principal exponent, is competent to produce the same effects, when properly managed, formerly expected only from bloodletting, or other evacuants, and powerful sedatives. The nonsense about its "locking up the secretions," is pretty effectually exploded, and almost everybody knows it ranks next to and sometimes above quinine as an antiperiodic. These are only a few of the reasons why.

Adulteration of Milk.—It is stated that Borax is employed to prevent milk from turning sour, and also to impart more consistence, so as to appear more creamlike.

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EDITORIAL AND MISCELLANEOU

The Domain of Medical Police. (Abstract of a paper read before the N. Y. Sanitary Association, Feb. 6th, 1862.) By Louis Elsberg, M. A., M. D. Pamphlet, pp. 16.

Slowly, but steadily and surely, the thinking men of the profession are advancing toward the clear apprehension of the great truth that the larger part of the true physician's office consists, not in the administration of drugs, whether as prophylactics, specifics or "even to meet the indications," but in the discovery and control of those other and larger influences which beget and continue disease.

Disease is beginning to be understood as an orderly phenomenon—it has its laws as assuredly as health. Conditions change and results are changed. The normal order of relations of the organs and particles of the body to things without and within being modified, we have pathology in place of physiology—but all the time *order*.

Our duty as physicians is to bring back the normal order by controlling all disturbing causes. This is simple enough, but it is not exactly clear why a case of Typhus, begotten and sustained by bad air, food, water, fatigue, etc., etc., should

engender, not especial attention to these things, but to Emetics, Verat. Virid, Turpentine and Chlorate of Potash. Certain adroit combinations of these and others are thought better adapted to restore to health than taking an immense amount of time and trouble to find out and remove atmospheric and terraqeous disturbing agents. It is easier to feel pulses and look at tongues, and then write a prescription or dole out a parcel of pills. It looks wiser to name the disease on the instant and write its remedy in a *billet doux* to the druggist the next. A method compendious and convenient enough, but unfortunately altogether fallacious.

Dr. Elsberg, in the pamphlet before us, does not undertake to elucidate the whole subject, but in his own words: "to run over the volume as if it were before us, *not* in its separate pages, but by its preface and table of contents." And we notice his essay not to reproduce its contents or even to give a systematic outline of its topics, but merely to detach a sentence here and there, and heighten attention to the general subject matter.

After defining the term police, and explaining its necessity to civil society and adverting to the limits of its compulsory power, particularly where its duties touch upon the general health, remarking that medicine bears to police, as medical police, a similar relation to that existing between it and law as medical jurisprudence—he continues:

The *domain* of medical police admits of a division into three departments: (1.) Preservation of Public Health; (2.) Removal of Disease; (3.) Administration of Medical Affairs. These three divisions link, at many points, however, closely into each other. The first embraces not only the maintenance, but also the promotion of improvement of the existing sanitary condition of the community, primarily therefore the exclusion of the causes of disease; the second includes the re-establishment of the perturbed state of public health, specially therefore the cure of diseases; while the third embraces the totality of the various laws, regulations, and institutions referring to medicine.

Medical police should be in the hands of competent medical

men. It is true all medical men may not be competent to the position, but certainly none but a medical man is. To secure a competent medical *personnel*, the State should provide for and regulate medical education and practice. It should regulate the supply and sale of drugs, medicines, poisons, etc., etc. During the prevalence of epidemics, the duties of the medical police are especially important. It should build and sustain hospitals; prevent premature interments, and provide for rescue from apparent death, drowning, etc. Accidents of all sorts should be within its purview, both for immediate assistance and prevention of repetition.

Par excellence—it should act as a *Sanitary* Police.

The most important and fertile source of *effective public hygiene* is thorough, minute, and extensive SCIENTIFIC OBSERVATION of the *sanitary condition* of the community, and the *causes* influencing it. That such observations, or in other words, *skilled sanitary inspections*, can be made only by persons of a medical education—that private physicians cannot make them extensively and continuedly enough for the purpose, and that they require specially appointed *health officers*, surely is too evident to every intelligent person to require much elucidation.

Let any one but *consider* (even if ever so superficially) what duties such inspection involves. It must embrace the whole manner—the *tout-ensemble*—of a man's life and his relation to all naturall and artificial agencies affecting health. It must yield scientific STATISTICAL, CHEMICAL, MICROSCOPICAL and TECHNOLOGICAL results for sanitary purposes. It requires a health officer to prepare, and keep corrected, a SANITARY MAP, (of the district alloted to his inspection,) showing the grade, width and condition of the streets, the sewers, the soil, the vacant lots and buildings, and a SANITARY REGISTER, showing the number and condition of the inhabitants; not only the deaths, but also the diseases occurring in each locality, with meteorological, barometric and thermometric records, as well as occasional chemical and microscopical analyses of the air and the drinking water of a particular locality, of particular articles of food, etc. I do not mean to say that every *medical man* is fit for such inspection, but that none except a person of a *medical education* IS! A health officer, besides making the ordinary medical studies, must pay *particular*

attention to the causation, eradication and prevention of disease. And here, allow me for a moment to enter into an explanation of the *term* "disease." Although it is convenient in description and discussion to speak of disease as an entity, all educated physicians (if not, indeed, all educated persons,) are well aware that what is so designated, has really *no* personal or ontological character, but is only a condition, and may be defined "a *perversion* either of the functions or of the structure of the body, or of any of its parts." It is, in other words, "a deviation from the normal physiological state or action of the organism under the disturbing influences of morbid causes." In this respect, the positive progress of physical science enables us to stand to-day on altogether a different footing from that of our forefathers. "All pathology is but the physiology of organic perturbations."* The organism never becomes diseased by itself, nor does it ever alone become a cause of disease. Being the source of all manifestations of life, it is at the same time, also, the means of preservation of these manifestations; only that in its material constitution lies the general possibility of becoming diseased. But the realization of this possibility requires the addition of another factor, that may be called morbific—or literally, sick-making—Cause!

The morbific cause must, however, not be regarded a unit. In all cases there are really two different factors, only the co-action of which makes up a cause: producing disease as such —*i. e.*, that calls forth the phenomena giving rise to the term. But in many cases, the organism is forced, by original or acquired constitution, to act as second factor when one factor of a morbific cause has gone into operation. These factors are called, respectively, remote or predisposary, and direct or exciting cause. (One alone has also been called the cause, and the other the totality of circumstances under which it can act.)

Every man, even the healthiest, as we find him, has natural predispositions to disease; every one will therefore, under favoring circumstances, become sick. Predispositions as well as morbific causes are very numerous and diverse. They are all of interest and importance to the practicing physician, but medical police is specially concerned with such of them only as transcend the ability of the individual to exclude. As to

* Memoranda Medica, or Note-Book of Medical Principles. By Henry Hartshorne, A. M, M. D. Philadelphia, 1860.

others than such, its province can only extend, according to circumstances, to calling attention, by appropriate instruction and warning to the danger and the means of avoiding it; as to the former, however, it has the right and the duty to enforce regulations for their exclusion.

The branch of medicine specially concerned with the *annihilation of the causes of disease* has, during the last few years, found many ardent investigators! A *new name: Nosophthory*—literally, the science of eradicating disease—has been given to it, and it bids fair to attain the rank of honor among the medical sciences!

The SURVEY of this domain of Sanitary Police (i. e., *the exclusion of morbific causes*,) may, for our present purpose, be divided into three sections, viz: I. Total Extinction of Causes of Disease. II. Protective Measures against Contagious Diseases. III. Protective Measures against Miasmatic Diseases.

I. The total eradication of certain diseases may be considered under the two sub-heads: A. Prevention of hereditary diseases. B. Removal of injurious external influences.

We have given this long extract because of its sound truth, and because it sustains the views which for many years we have labored to inculcate to medical students, and diffuse among medical men.

Civilization has been too long looked upon as necessarily introducing elements of disease and abbreviation of life unknown to man in the so-called state of nature. But the truth is, a true civilization lengthens indefinitely the average term of life. Appropriate understanding of them will by and by not merely render the causes of disease innocuous, but, moreover, render them subservient to still higher development of man's material and mental organization.

Under the heads given Dr. E. glances at Hereditary Diseases; Illegitimate Procreation; Injurious External Influences; Foundling Hospitals; Lying-in Asylums; Physical and Mental Education of Children; Food and Drink and their Adulterations; Articles of Manufacture; Domiciles; Streets, Docks, &c.; Public Buildings; Removal of Injurious Effects of Trades, &c.; Burial Grounds; Sale of Poisons;

Precautions against suicide, drunkenness, injuries from the insane, and various accidents, obstructions, excavations, explosions, fires, &c.; Protective measures against Contagious and Miasmatic diseases; Epidemics, Endemics, Typhus, &c., &c. Then:

In conclusion, let me repeat five words, which we can never too often reiterate in the ears of the public and of our Legislature—five words of *Truth!* and *Hope!!* and *Charity!!!*

"*All malignant epidemics are preventable.*" "By attention to the laws of public and domestic hygiene, all malignant epidemics are preventable." This truth must become the gospel text of the Evangelists of Sanitary Reform! Promulgate through all the avenues to the public mind, every civilized community must appreciate its import, and would soon, by appropriate sanitary measures, realize some of its promises!

"All malignant epidemics are preventable," AND CAN BE PREVENTED by attention to the laws of hygiene, which it is the object of *this Association* to have systematized and acted upon in the Metropolitan Health District! SHALL *they ever be prevented among us?*

Well did the Sanitary Committee of our Board of Health for 1849, say: "To no other work should the authorities address themselves more earnestly than the establishment of a *thoroughly organized medical police.* * * * The *advantages* of such a measure would be *incalculable.*"

Well did the State Senate Select Committee, in 1859, say: "Preventive Medicine, rising rapidly to the perfection of a science, is capable of exerting a vast influence over the welfare, physical and moral, of the human race!"

Well did Dr. Griscom, *before this Association*, but a few months ago, quote Mr. Simon's words: "*Preventive Medicine* will effect INFINITELY MORE for mankind than all the drugs which have *yet been discoved*, and all the *curative skill* which has *ever* been exerted for the *alleviation of disease.*"

If ever any city could profit by the establishment of a medical police, with the enlarged scope Dr. Elsberg has indicated, this city of Chicago most certainly is one which would; but the experiment, if it may be so termed, has yet to be tried.

This city illustrates on the large scale the salutary effects of free ventilation. Its ventilation is the only thing which prevents it from being a Northern Cairo (we do not refer to Cairo

Illinois, but to its *old* Egyptian namesake.) The site is low and flat, abounding in surface water, stagnant pools and reeking vegetable decomposition. Art has lifted quite a portion of the central city a few feet above the perpetual surface water, and a certain amount of tardy sewerage is possible. But much of the inhabited part of the city is still upon the old level, with water standing in the cellars, and rank with dead dogs, dead cats, offal and garbage of every description in the alleys and back streets, which need but trifling excavations to be canals. The sewers and drains nominally find exit into the river from much of the general surface, but as the river has no fall, and fluid will not rise higher than its source, the only effect is conversion of its contents into a "gruel thick and slab" black as Erebus, yet its surface in the sunlight prismatically colored from creaming grease, and sending heavenward constantly odors more pungent and foul than the nine-and-thirty stinks of Cologne. The hog and cattle yards and slaughter houses, the distilleries and breweries, and worse than all a hundred fold, the gas-houses discharge their accumulated abominations into the same reservoir, and the commingled "stench thereof ascends to heaven!"

In the palatial residences of the wealthy, and in the cellars of the poor, everything is damp—every material object, as Signor Mantalini remarked, "is a dem'd, moist, unpleasant body." Gas pipes leak in all possible places. The festering garbage and offal of the graded streets and alleys are every now and then gathered into piles and carted off to assist in filling up those "below the grade," and the sun and the rains mingle the decomposing ordure into a compost vile beyond the delineating faculty of a Dickinson to depict and vituperate.

And yet to-day Chicago is habitable, indeed pleasantly so, and what is more, no healthier city is to be found on the continent. "There is a Divinity which shapes *its* ends," and allows the wind to blow where it listeth untaxed, and unarrested by the police. Fortunately for us the "Board," what-

ever its other powers, cannot control the winds or the weather. The lake shore, and the vast unoccupied spaces in the city limits, held by speculators and waiters upon Providence, afford breathing spaces and ventilating draughts. Thus the winds, which strike the stranger to Chicago so rawly and disagreeably, are our salvation, whilst of human "medical police" there are none or worse than none.

We venture the assertion that the co-operation of an enlightened board of medical police, with a comparatively trivial pecuniary expense, in a single season would render Chicago a marvel of salubrity.

Meanwhile we are at the mercy of the winds, and of a "Board" and "Council," who are also sufficiently windy and who fail to discover facts immediately under their corporate nose. We expect when the war is over, and men have time to reflect that preserving life is more noble than destroying it—then we may have a medical police. Before the war lives were too plenty already, and the disciple of Malthus in better vogue than the Æsculapian. Perhaps after it, there may be felt a public necessity for a new stock of vitality, and methods of preservation be adopted which will illustrate the general belief that the life of a man is part of the wealth of the State, and that his health is not only an individual but a public advantage.

At the present not even the medical officers of the army can get respectable attention paid to the subject—in civil life the effort is altogether Utopian.

On Military and Camp Hospitals and the Health of Troops in the Field.—Being the results of a commission to inspect the sanitary arrangements of the French Army and incidentally of other armies in the Crimean War. By L. Bauden,s Inspector and Member of the Council of Health of the French Armies, etc., etc. Translated and Annotated by Franklin B. Hough, M. D., late an Inspector of the U. S. Sanitary Commission. New York: Bailliere Brothers, 440 Broadway; 1862. From the Publishers.

This is a very readable and interesting little volume of 260

pages, prepared by the author at the request of Marshal Vaillant, the French Minister of War. It is especially noteworthy from the important practical suggestions it contains with regard to the hygiene of camps, hospitals, etc. The most approved French methods are explained, and frequent comparisons with those of the English instituted, so that each may profit by the experience of the other. Incidentally, a considerable amount of surgical information is communicated.

Among the subjects discussed we note the medical topography of the Crimea; rations; camps and shelters; clothing; field hospital and medical service; surgical operations; chloroform; cholera; typhus in the Crimea; Scurvy; the Constantinople Hospitals, etc., etc. The translator appears to have performed his part of the duty carefully and judiciously.

The American Journal of Ophthalmology, July, 1862.—Julius Homberger, M. D., Editor and Proprietor. Published by Bailliere Brothers, 440 Broadway. 48 pages monthly. $2.00 *per annum.*

It is a bold undertaking to start a new medical journal in these times of wars, fightings and financial depression; and it would seem especially so if that journal is to be devoted to a specialty. Nevertheless, we trust the American Journal of Ophthalmology will prove a success. It is well printed; the contents of importance and interest, and the editor thoroughly competent for the position. We trust he will succeed in redeeming this specialty from the "class of mercenary, irresponsible and unconscientious adventurers" to which its practice is now almost given over. There is no fear that any specialty will be studied too much or elucidated too fully—the danger is quite otherwise than that.

Caries of Elbow Joint; Operation of Excision with Recovery of Useful Arm. Presented to the New York State Medical Society at its annual meeting, 1862. By N. C. Husted, M. D., New York City. Pamphlet 16 pp. From the author.

Aside from the details of the particular case successfully

treated by excision, Dr. Husted has compiled a brief history of the operation based mainly on the monograph by Dr. R. M. Hodges, of Boston. He endorses fully the following conclusions by Dr. Hodges:

First.—That although partial excision had been practiced upon several occasions, and by Mr. Wainman in England, so early as 1758-59, the first complete excision of the elbow joint was performed by the elder Moreau in 1794.

Second.—That excision for traumatic cause appears to be a safer operation than amputation, and ordinarily preserves a limb of very considerable usefulness. This is especially true of those occurring in civil practice.

Third.—That excision for anchylosis is only adapted to cases where the arm has stiffened in a straight position, or in one of extreme flexion, unless special circumstances authorize the risk of an operation frequently ending in no improvement of the anchylosis.

Fourth.—That in excision for disease death occurs once in 7 14 15 cases; and that the operation fails of its primary intention—the riddance of the disease with the preservation of a useful arm—by death, amputation or other cause, once in 3 17-34 cases. Patients recovering are usually able to resume their ordinary occupations.

Fifth.—That partial excision, either for traumatic or organic lesions, is a frequent cause of unfavorable results."

Fungi of Wheat Straw the Probable Source of "Camp Measles," and perhaps of Measles Generally.—Dr. J. H. Salisbury, of Newark, Ohio, in a communication to the *Amer. Journal of Medical Science*, propounds the idea that the fungi of wheat straw are the probable source of the measles which has proved the pest of the camps in both armies, and perhaps of measles generally. The fungi, he remarks, belong to the lowest types of vegetable existence, but, unlike flowering plants, they absorb oxygen and exhale carbonic acid. Decay is an essential condition to their development. In their chemical constitution the large per centage of azotized matter they contain likens them more to animals than to plants. Most of them have but a few hours of growth and maturity, and then as rapid a decay. Their characteristics vary with their pecu-

liar nidus. Even when appearing on living tissues they evidence decay of particles—thus even animals may present parasitic fungi capable, often, of being communicated from one individual to another. In man *porrigo favosa*, *sycosis menti*, and *aphthæ* are examples. Their individual cells and spores being microscopic, their detection is usually difficult and, we may readily conceive, sometimes impossible. Yet, undoubtedly, they sometimes produce deleterious effects by their presence alone, no further development occurring.

Hon. J. Dille, of Newark, called the attention of Dr. S. to the matter, he attributing an attack of sickness, accompanied with the usual symptoms of measles in a tolerably severe form, to inhalation of the dust from an old straw stack, portions of which were partially decayed. He could taste the old straw in his throat for days. The coryza and eruption were distinct together with soreness of the throat pain, delirium and fever.

At Camp Sherman, in the same place, strawticks in a state of decay were coincident to the prostration of a large number of the men (some forty or fifty at once) with measles. The most careful inquiry failed to ascertain any source from which it could have been imported, but individuals exposed to the first cases subsequently took the disease. Several other cases are adduced; and it is also stated that the same effects had attracted the attention of the Farmer's Club, and it is also noticed that swine growers who bed their hogs with straw are very liable to similar symptoms.

After a very careful microscopic examination of the various fungi affecting the straw, the forms of which he has given in the *Journal*, he proceeded to inoculate himself, and afterwards his wife and eleven others, with the result in from twenty-four to seventy-two hours of lassitude, chilliness, catarrhal symptoms, pains through the forehead and temples, and sometimes blotches on the surface. "The disease commenced in the head, throat and fauces, and passed downward, the bowels being very sore after the head, throat and chest were relieved."

The disease produced by inhalation of the spores or by in-

oculation, manifests the eruption in from twenty-four to ninety-six hours.

Dr. S. calls upon the profession to make observations and experiments upon this subject and report progress. He observes: "To what extent inoculation with straw fungi may prove effectual in protecting the human system against the contagion of measles, can only be settled by careful and extended experiments."

The subject is an important and interesting one, and although the observations and experiments made by Dr. S. are not sufficient to warrant the formation of an opinion, yet it can do no harm, and may do good to follow up the hint he has afforded.

Small Pox.—In the same journal, Prof. S. H. Dickson has an article urging further provisions to secure perfect vaccination. He would have strict police regulation of the subject making vaccination obligatory upon all. After arguing at some length, he says: "Let us procure that it shall be ordained that every child shall undergo vaccination by some expert within a month after birth; that as soon as the constitution shall have gone through its influence, inoculation with variolous virus shall be performed, and that this latter operation shall be repeated again and again at brief intervals, until all reasonable satisfaction has been attained of the entire extinction of the susceptibility to small pox."

The careless and inefficient manner in which vaccination is too generally performed—the use not only of improper materials, but of uncertain methods, and the failure to repeat it at suitable intervals, have gone far to lessen confidence in the process itself. Proper attention being paid to these points, we believe the protective power of vaccinia fully equal to that of variola itself, without the dangerous exposure of third parties incident to the process of innoculation.

Burns.—Dr. John Ashurst, Jr., in the same journal, dis-

cusses burns. He argues the necessity of prompt and judicious treatment. At first the burn is to be looked upon more as a constitutional than as a local affection. Put the patient to bed, wrap him up in blankets and administer say sixty drops of laudanum and an ounce of brandy. The shock of extensive burns is the most to be dreaded, and brandy and opium are the cardinal remedies. The amount which will be borne is surprising. If the patient is drunk at the outset, give ammonia freely. Dr. A. has given for weeks and weeks a pint a day of brandy in the form of milk-punch, and half a grain of morphine every six hours, and this was no more than enough to quiet the nervous jactitation and restlessness.

If half of the surface is involved in the burn, no matter how superficial, the patient will almost surely die. Even one third, if it be over the trunk, will almost necessarily prove fatal. Burns are the most mortal and *most* deceptive injuries the surgeon is called upon to treat. Dress a small portion first, say the arms, then the trunk and legs, then the face. Dr. A. generally employs the old "carron oil"—linseed oil and lime-water. The zinc paint, Kentish's ointment, solution of lunar caustic, are inferior in his opinion.

The best method, he thinks, is to soak pieces, not more than eight inches square, of patent lint, Canton flannel, or old linen or cotton in the mixture, apply accurately over the parts and cover the whole with oiled silk. He prefers these to the carded cotton. The dressings should be retained in place by roller bandages. The patient should be encouraged to make hearty meals. The state of the bowels and urinary organs should be carefully attended to. Great care should be exercised that he does not drink too much water. Bits of ice, carbonic acid, water, etc., may be employed, but never over a mouthful of fluid at once.

If the reaction is violent and accompanied with delirium, it requires the treatment of mania-a-potu—brandy, opium, lupulin, valerian and the category of nerve stimulants. The sores should be dressed *as seldom as possible*, and after the

sloughs have separated, simple cerete, and subsequently carb. zinc cerate or ung. zinc oxid. may be substituted for the carron oil on the patent lint.

Great care should be exercised in cleansing and dressing the sores. Cold should be excluded and the water used rather above than below the temperature of the room. The raw surface should not be touched by the sponge, but the surrounding skin should be carefully sponged. When granulation and cicatization begin it is advantageous to squeeze from a sponge a little whiskey over the surface. This causes considerable pain, but if the dressing is speedily applied it is only momentary. Occasionally the edges need touching with lunar caustic in substance, and constriction is to be prevented by suitable splints and bandages. He cannot agree with Keutish in recommending low diet and purgatives during the suppurating and granulating stage, but urges full diet, tonics and stimulants, especially Tr. Ferri Muriat, Quinia and Acid. Sulph.

Coma, which sometimes occurs in the early stage, forbids the use of opium. Tetanus is to be combated by Cannabis Indica. This remedy he has given with success in doses of one grain of the extract every two hours.

He is convinced that careful observance of these rules, which have been impressed upon his mind by sad experience, would vastly lessen the mortality of burns, so long considered the opprobrium of surgery. Briefly, the general condition is *first* to be attended to. A burn is essentially a disease of depression, not of excitement. There is nothing to be eliminated—no "fire to be drawn out." None to be given up, until *in articulo mortis.* Immediate action is demanded, and hesitancy and vacillation are positively criminal.

We are a little surprised that the author does not allude to the local application of flour in these cases. It is always readily to be procured, and we have seen striking relief from its use in seemingly desperate cases.

Traction of India Rubber in Fractures of the Femur.—John H. Packard, M. D., commends the use of India rubber cords or straps for the purpose of keeping up the steady and unintermitting traction needed in fractures of the thigh, the idea having been suggested to him by the elastic "accumulator," commended by Barwell in his "Dis. of the Joints." A thick and strong piece of rubber should be used, as continuous stretching impairs the elasticity of small pieces. He figures his own apparatus, but methods of application will readily suggest themselves to every practitioner.

Paraplegia.—In a recent clinical lecture, T. Gaillard Thomas, M. D., Physician to Bellevue Hospital, tabulates the comparison between organic and functional paraplegia. We reproduce from the American Medical Monthly:

Organic Paraglegia.	*Functional Paraplegia.*
1. Comes on suddenly, and is more or less complete.	1. Comes on gradually, and is always partial.
2. There is pain in back, extending down the legs and around the body.	2. No fixed pain in back or legs, and no "band" around the body.
3. Passing ice or hot water down spine gives great pain.	3. None is experienced.
4. Jerking or spasm of muscles of legs exists.	4. None.
5. Bladder and rectum are affected.	5. Not so.
6. Prickling and formication occur.	6. None.
7. As time passes the paralysis becomes worse.	7. As time passes it diminishes.
8. There is great tendency to bed-sores.	8. None whatever.
9. Extremities are colder than normal.	9. Temperature normal.
10. Sensibility impaired.	10. Not so to any great degree.
11. Muscular enfeeblement is strictly confined to the lower limbs.	11. There is often a tendency to enfeeblement of upper limbs.

Dr. G. remarks that in the treatment of organic paraplegia "the indication is to disgorge as much as possible the vessels of the cord, and produce a sedative, quieting effect upon it. In the functional variety the reverse is true; we should endeavor to stimulate the functions and circulation of the cord."

It would appear from the former part of this statement that Dr. G. considered all organic affections of the cord as essentially inflammatory, and as requiring antiphlogistic local and general treatment. The causes of functional paraplegia, generally, he notes as follows:

1. Blood poisoning, *e. g.:* Syphilis, Lead, Arsenic, Diphtheria.
2. Intense irritation of any part of the nervous system, *e. g.:* Worms, Dentition, Disease of genito-urinary system, and any acute affection.
3. Hysteria.
4. Great impoverishment of the blood, as after malarious fevers, parturition, etc., etc.

To the conjoint statements, we beg leave to "plead the general issue" that organic diseases of the cord resulting in paraplegia are by no means necessarily of an inflammatory character requiring means to disgorge its vessels and produce a sedative quieting effect upon it; there are frequently cases where, even though organic disease be present, all those agencies which the author would restrict to "functional derangement, become immediately useful. We object *in toto* to the term "functional" in this connection. Perhaps Dr. S.'s idea was to diagnose the so-called inflammatory affections of the cord from those where its structure does not manifest those gross and striking lesions generally referred to inflammation. We suggest that: That usually denominated *inflammation* in any part is a general term embracing a number of varieties of modification of nutrition of that part.

All those agencies which he characterizes as productive of "functional" paraplegia, likewise disturb the nutrition of the cord, either directly through the blood, or through the nervous system, in either case simply modifying the nutrition—

changing the molecular structure of the part—and—consequently *the lesion is always organic.*

The division given is a useful one insofar as it goes to counteract the baleful antiphlogistic treatment, too often indiscriminately applied to all cases of paraplegia.

Rest and Nature.—Mr. Hilton concluded his invaluable series of lectures on "The Influence of Physiological and Mechanical Rest in the Treatment of Surgical Diseases and of Accident," delivered in the theatre of the Royal College of Surgeons, with the following words:

"I have always thought, with some others, that disease is nothing more than an abnormal arrangement of, or a simple deviation from, normal conditions; and that physiology should be made the basis of pathology, and of the deductions therefrom essential to the guidance of accurate surgical practice. And it struck me that, in discussing the question of the influence of rest in the treatment of disease generally, I might, more especially by pointing out its application to the disease of the joints, induce in the minds of some of our professional brethren a more philosophic consideration of the pathology and treatment of a class of cases which are not unfrequently abandoned to the care of the empiric and the mindless.

By regarding this subject of physiological and mechanical rest in what I conceive to be its proper professional light, the surgeon will not only discover and readily interpret the exigencies and necessities of man's most wonderful, most comprehensive, and most perfect mechanism, but he will be compelled to admit that he has *no power to repair directly* any injury which this machinery may have suffered, or to supply the minutest living atom towards filling up the gap made by disease. It will induce him to acknowledge, in all humility, that it is the prerogative of vitality to repair the waste of its subservient structures, and to realize that the surgeon's chief duty consists in ascertaining and removing those impediments which obstruct the reparative process or thwart the efforts of Nature to redress injury, and thus enable her to revert to her normal existence."

Mutatis mutandis, the same words are applicable in the practice of medicine as well as surgery—the idea of which is gradually getting more and more clearly defined in the pro-

fessional mind. That physician whose whole stock in trade consists merely of a list of symptoms for which certain medicines are to be used, is not up to the level of the times, whether he give calomel or infinitesimals. "It is the prerogative of vitality," by which we understand the organizing processes within the depths of the organization itself,—to perform the cure. And yet be it observed, that this does not detract a hair's breadth from the importance of the physician's office—it does not, as some absurdly suppose, leave everything to nature. Far from it. "Nature only cures," says Cabanis, "in peculiar circumstances and under certain conditions—whereas by art we are enabled to change the former and to fulfill the latter." Thus this

> ———"is an art
> Which does mend nature,—change it rather; but
> The art itself is nature."

"It is the really enlightened physician alone," says Sir Gilbert Blane, "who can discern in each particular case, to what extent art is availing, or if it is at all availing. * * * Those who conceive the whole art of medicine to consist in wielding the powers of the Materia Medica, entertain a narrow and unworthy view of their own duty and of the value and dignity of their profession."

True enough is what Hippocrates says: *Natura sibi invenit vias, et inerudita existens, quæ expediunt perficit*—but it is just as true that the ignorant man is a thousand times further from nature than he who is wise. It is the object of true wisdom to correct the mistakes which ignorance makes with regard to nature. Positively to unlearn the errors of the eyes and ears, which constantly deceive the uninstructed. And this to the medical man is especially important. For, as Blane writes, "from all I have been able to observe, the ignorant person is more apt to counteract nature by pernicious interference, than the wildest professional theorist; nay, ten to one, he is the greatest theorist of the two, for every old woman has her theory generally drawn from the humoral pathology."

Which also is worth thinking of!

Some writer a few years ago hit the point exactly thus: "The acquirement of our professional learning requires a *scholar;* its practice requires an *artist;* its standing and social relations demand a *gentleman.*" Is that a trinitarian doctrine too mysterious to be comprehended? We trust not.

Cancer Treated with Arsenical Mucilage.—Dr. W. Marsden, Surgeon to the Royal Free and Cancer Hospitals, reports four cases of cancer cured by local application of arsenical mucilage. He states that the application was rigorously limited to the fungous structure, experience having told him that its application to the healthy tissue is fraught with extreme danger. The proportion of arsenic is not given. It seems to be pretty well established, that the stronger the local application, the less danger is there of absorption to the general system.

Inter Orbitar Aneurism.—M. Ernest Hart reports a case of Intra Orbitar Aneurism cured by ligature of the carotid after failure of digital pressure. Of twenty cases of this affection on record, treated by ligature of the primitive carotid, thirteen were completely successful; three incompletely so; three died, and one was wholly unsuccessful.

From the success of Brainard (in a case where the ligature failed) with an injection of a solution of lactate of iron (eight grs. to the ounce), and M. Bourquet's case, when he used an injection of solution of perchloride of iron, he observes that the treatment by injecting coagulating fluids is worthy of being recorded among our surgical resources, as often preferable to the ligature. Digital pressure is to be preferred where it can be tried. This has proved successful in eighteen days, the total duration of the pressure being only seven hours and twenty minutes.

Ovariotomy—Death by Tetanus.—Dr. E. S. Cooper recently performed ovariotomy. The patient passed on admirably un-

til the eighth day, when, by domestic neglect or brutality, she was exposed to a severe draught of cold air. A severe chill soon ensued, followed by tetanus, under which she sunk upon the ninth day.

Amputation of the Fore-Arm.—The Lancet states that excellent stumps are secured by a modification in the usual process of amputation of the fore-arm, at St. George's Hospital. "It consists simply in making circular incisions through the skin of the fore-arm, drawing it well back, then making flaps of the muscles, and finally sawing through the bones. The healing process goes on with great rapidity, and the ends of bone have a firm substantial cushion of muscle which is perfectly covered by the skin. There is no redundancy of material, but a smooth, even, comfortable feeling stump," well adapted for affixing an artificial hand.

An Old Case.—Serous Cyst Connected with the Kidney.—Richard B., aet. 20, late from England. Eleven weeks before had nephritis, treated by vigorous antiphlogistics. Previously healthy. Did not entirely recover, but able to go about. Exposure to cold, etc., put him to bed again with evidences of ascites. The attendants "drenched him" with Cal., Gamboge, Colocynth, etc. Paracentesis *at the navel.* One side only was emptied, the other remaining tumid and tense, with distinct fluctuation. This side was punctured, *at a venture*, and about a gallon of serous fluid discharged. General anasarca and general debility both being present, and *both* sides filling up again, among others the writer was called in council.

One Dr. S. supposed that the side which refused evacuation through the navel, had an accumulation of fluid between the peritoneum and the abdominal parietes. Another Dr. S. said it was clearly an abscess in the cellular tissue of said parietes. Another Dr. present thought it could not be ovarian dropsy because the patient was a man, but what else it might be he had not the remotest conception. Dr. H. thought it was

enlargement of the spleen, but, being in altogether a different part of the abdomen, he supposed there must be an abnormal arrangement of the viscera—besides this he concluded there was disease of the liver and mesenteric glands. On the whole all but one of the party concluded the liver to be "at the bottom of it." No matter what the writer said or thought, it was not regarded. Salts and Senna were given, as Calomel had been in large doses. The cyst and abdomen both filled rapidly. Calomel and Squills were given every two hours; Mur. Tinct. Ferri every eight hours. Another hole was cut in the side, the water drawn off and a long catheter introduced on a tour of exploration. Another hole was made at the umbilicus to draw off the fluid from the peritoneal cavity. In twelve hours the distension was as great as ever. A string of candle wicking was then threaded in the eye of the catheter, and passed from one aperture to the other, and left there. The fluid drained off at its leisure. The distension was overcome, but unfortunately the patient died some eight or ten hours after.

Post mortem revealed a large serous cyst attached near the lower extremity of the right kidney, that part of the kidney being completely disorganized. The cyst would hold about six quarts, the walls being made up in considerable part of the mesentery, mesocolon and momentum—a perfect riddle of morbid anatomy; the original sack seeming to have been developed by sheer distension of the peritoneal covering of the kidney. Its contents had no urinous odor. The other viscera of the abdomen were healthy. Examination of the thorax was not permitted.

There are no further notes of the case—this fragment only having floated away scorched by the flames which years ago burned up the notes, comments and reflections upon this, and a multitude of other cases, which the writer wrote out in the earlier years of practice.

The writer and one other of that original "Council," are now the only survivors, for that was many years ago. The

other survivor will never see this sketch of that old consultation—for it was twenty years before that time, (as never since,) that he had seen a medical book, much less a medical journal.

An Astounding Case.—Not many years ago, and not a thousand miles from this city, occurred a death under circumstances indicating upon the part of the patient the most sublime disregard of the "authorities."

The case was in charge of a doctor, long celebrated for his unflinching faith in Hydrarg. Subchlorid. The patient was purged therewith, and therewith again and again purged. "Alterative" doses were given, interspersed with occasional purgings. But down he went, to the utter astonishment of the Doctor, who is nothing if not "heroic" with calomel. In spite of purging and salivation, the patient died. Believing the case extraordinary in the extreme, in connection with several professional gentlemen, he made a *post mortem.* Nothing was found by the scalpel to account for the death. Dropping his dissecting knife under the profound agitation of his feelings, the Doctor exclaimed, whilst his spectacles shook with his emotions: "The secretions were perfectly restored—half an hour before he died he had a regular *spinach* stool. I wonder what in h—l he died of!"

It may be observed that the public saw nothing especially remarkable in that case—any more than it did when the Banker died. The public had become accustomed to that kind of result. Every day wonders do not astonish us.

Spina Bifida Cured by the Iodine Injection.—Dr. Lezerie reports, in the *Moniteur des Sciences Médicales*, Oct. 8th, 1861, a case of spina bifida in an infant of 9½ months. The tumor was in the lumbar region, and as large as a moderate sized orange. Paralysis of the lower limbs, and partial paralysis of the upper, but no hydrocephalus. It had twice spontaneously opened and then refilled. M. Lezerie operated in the usual manner and with the proper precautions. Two injections of

equal parts of Tinct. Iodin. and water were made, having first allowed part of the contents to escape. During the progress of the case, compresses dipped in an iodine solution were kept over the tumor. The success was marked, the paralysis commencing to disappear in a few days. Twenty-seven months after the operation, the tumor was found reduced to the size of a hickory nut, the child well developed, running about and with no trace of her former condition, save incontinence of urine. A renewal of the operation at an early period would probably have abbreviated the duration of the case.

Why Was It?—An army surgeon, from Wisconsin, who has been with his regiment in Tennessee, writes us with regard to the statement, made in the June number of this JOURNAL, (p. 348,) about the success of a volunteer surgeon in reducing the sick list of the regiment to which he was detailed from 349 to 80 in a single week. He says: "Now I would like to know why it is he could succeed with astringents, while dozens of good surgeons could do nothing with the disease (camp diarrhœa) under this treatment? I think his treatment calculated to do harm in every case of camp diarrhœa where it is applied."

Our friend will recollect that we only "did tell the tale as it was told us," and called upon the actor-in-chief to give us the facts over his own signature. To this call there has been no response. Our own private opinion is that the Dr. made the astringent decoction with the addition of Capsicum and Carb. Ammonia, *exceeding mild*, and cultivated the hospital cook and good regimen, whereupon the decoction (said to have been made by the barrel,) became quite tolerable and readily to be endured. We need not repeat for the hundredth time that we have no faith in specifics, or specific mixtures, for this "plague of the armies."

Our correspondent continues: "I think the disease consists in, or is caused by, congestion of the portal system, irritation and many times inflammation of the mucous coat of

the large intestine, vitiated secretions, and, in many cases, paralysis of the lacteals and exhalants, so that the one does not take up the chyle, and the other pours out the watery constituents of the blood in exhausting quantities, indicating in my opinion, the implication of the ganglionic system.

"Now if this state of affairs exists, can it be that a course of astringents will be of any permanent benefit? If so it is different from any of your teachings that I have ever listened to, and certainly different from my own experience."

We beg our friend's pardon for extracting thus much from his private letter, but as it hits several nails precisely on the head he will certainly forgive us. The causes of camp diarrhœa are as multifarious as the causes of diarrhœa in civil life, and precisely the same principles of treatment are applicable with chances of success in equal ratio provided its causes are withdrawn. There is no Morrison's Pill about the matter.

Glycerole of Aconitia.—The *Druggists' Circular* replies to an enquiry by a Chicago correspondent that the Glycerole of Aconitia "is probably the best mode of use of the alkaloid. It is prepared by adding to the powder enough acetic acid to dissolve, and mixing with glycerine. No standard strength is given; one grain per drachm of glycerine would most likely be best."

Lapis Vulnerarius.—The *Circular* gives this formulary: ℞ Aluminis ʒ iij; Zinci Sulphat. ʒ iij; Cupri Subacet. gr. iv; Ammon. Chloridi, gr. iv. Fuse together in a crucible and add two grains of powdered saffron.

Cleaning Bones.—The same paper directs for this purpose a pound of Chloride of Lime to two gallons of water, and add a solution of about an ounce of bicarbonate of potassa, cold.

Administration of Cod Liver Oil.—M. Dannecy, in the *Union Medicale* recommends the exhibition of eight or ten grains of magnesia suspended in water after each dose of the oil. It is said to be completely successful in preventing the vomiting so apt to occur even some hours after taking the oil.

Cement.—Six parts of plumbago, three of slacked lime, eight of sulphate of baryta, and three of boiled linseed oil makes a very superior cement for laboratory use, as also for gas or water tubing, steam pipes, boilers, etc.

Antiseptic Solution.—M. Leprieur commends arseniuretted alcohol for the preservation of objects in natural history. They should be immersed in the solution twelve hours and then dried, when they will no longer be subject to the destructive attack of insects, larvae, etc., as well as preventing their own decomposition. No other means has been found as efficacious.

Tartarized Antimony Pustulation of Nævi.—Strickland Kingston, M. D., in the *London Lancet*, recommends that the base of the nævus should be freely transfixed and punctured in different directions by the acupuncture needle, and then covered to the thickness of a sixteenth of an inch with an ointment composed of from two to four grs. of Tartar Emetic to eight grs. of Spermaceti. The scabs of the subsequent pustules are allowed to drop off spontaneously when the nævus will be found healed.

Embalming.—The body of an individual having very peculiar development, the peculiarities of which were that a form of perfect symmetry was surmounted by a head the fac-simile of that of the gorilla, the face covered with coal black hair, yet belonging originally to an "intelligent, kind and accomplished" female, is preserved and on exhibition at No. 191 Piccadilly, London. She died five days after giving birth to

a child, the fruit of legitimate wedlock. The child's body is also preserved by the same process. The bodies stand before the observer "without the slightest odor, the slightest change or slightest appearance of corruption." The *London Lancet* is promised the particulars of the process by which these bodies have been thus preserved unchanged for a long period.

If published generally it is to be feared that Mr. Artemas's "wax figgers" will speedily be thrown into the back ground.

Hallucinations of Chloroform.—The *London Lancet* records another case in which a female accused a dentist of having criminally assaulted her whilst under the influence of Chloroform. The charge was dismissed by the magistrate as unproven, and the dentist brings a cross action for defamation of character. Meanwhile it is well to recollect, that while no man can prophecy what a woman will say or do when not under Chloroform, the uncertainty is materially increased when she is. That potent agent, therefore, should never be administered unless in the presence of other parties, and, if possible, a female friend of the patient.

Bread-Making by Machinery.—This process which has so long been in vogue in this country that it has ceased to attract public attention or comment, is just beginning to get itself talked about "over the water." We expect to hear by the next steamer that an injunction has been sued out against it, as in the instance of our enterprising, and somewhat talkative countryman, George Train's street railroads. The *Lancet*, however, thus far pats the project on the back.

Vital Electricity.—Galignani has a "sensation" in regard to recent experiments, going to show that the living frame has a direct action on the magnetic needle,—"what consequences may be evolved therefrom, time alone can show."

About Mercury and Blisters.—At the outset of various

"inflammatory" diseases, mercury, in cathartic doses, is undoubtedly antiphlogistic. By its evacuant action it causes the bile, a liquid rich in carbonaceous, and consequently calorifacient, matters, to escape absorption and pass out of the system. In this regard, under certain conditions, well understood, it is one of the most efficient cathartics. From this point, until the exuded material of inflammation becomes consolidated, there is no warrant for its use. When the exudation consolidates in its new situation, there is reason to believe that it may become useful again, by its power of stimulating or accelerating the molecular change which must occur before the new formation can be reabsorbed. But when the molecular change passes to suppuration, the mercurial again becomes unwarrantable.

Practically, the time for the administration of mercurials, in "alterative" doses, corresponds with, or is subsequent to, the "blistering point," so clearly designated in all our best standard treatises on practice.

The facts in our possession warrant the assertion that employed before this point is reached, alterative doses of mercury are worse than useless.

Long lists of recoveries can be given where "alteratives" have been relied upon from the very outset of the disease, but it is now safe to remark that the beneficial results attained depended wholly upon, first—the primary cathartic action of the Mercurial, and, second, upon the opiate with which, from time immemorial, the "alterative" has been combined.

The "alterative" dose of mercurial is not antiphlogistic, but *stimulant.*

Slowly the best observers have reached this truth, particularly having been obliged to recognize it in hepatitis, and speedily after in other phlogoses.

The result is, the range of application of mercurials has been amazingly restricted, but, under the appropriate conditions, resort to them is had with immensely greater confidence and certainty.

There is something of a similar history to blisters. Formerly in every case of inflammation the blister was clapped on externally at once, and the Calomel exhibited internally at the same moment. Hence the measureless discussions about their utility—until the happy idea of the blistering point struck shrewd and cautious observers, since which time they have been largely restricted in application.

Nevertheless their so frequent use in "inflammatory" affection fostered the notion of their being "antiphlogistic" in their effects. Yet practical men have again and again resorted to them for their *stimulant* impression. The simple fact is the blister is not "antiphlogistic," but *stimulant*, in precisely the same sense that mercury is stimulant, that is it hastens molecular change, not only in the part of application but also in the part which it is in physiological relation, either through the nervous ("reflex") system or by the circulation.

In this sense the application of a blister to the thorax in pneumonia, has an internal influence altogether identical with that of a stimulant applied to an external inflamed part—(the conjunctiva for example)—and with similar danger of error in application, dependent on the exact condition of the part.

Practically there is no therapeutic fact better established than that, to favorably impress certain internal inflammations, particular external parts are to be selected for applying of the blister—a phenomenon which utterly disproves the idea which has been frequently advanced by enthusiastic admirers of Cantharides, that the medicine acts only through the general circulation. The effect cannot be imitated by exhibition of the cantharides internally, neither by their application externally at other parts. Pneumonia requires the blistering cerate over the part, and will not be benefited by vesicating the arm or the leg—yet the arm is anatomically the nearest, and the leg the more remote, so that, in the latter case, the old theory of *revellent* action fails, as in the former does the circulatory hypothesis.

More inquiry is requisite in each case as to the exact kind of

modification of nutrition which is present, that under the general and vague term "inflammation" may not be confounded (as is now too frequently done) a great variety of morbid conditions.

Meanwhile it is to be recollected that healthy blood is the best modifier of nutrition, the best alterative, the best resolvent. The practical induction is obvious.

Local Bloodletting.—Since the striking discontinuance of the heroic general bloodletting, found so useful in the diathesis of fifty and a hundred years since, frequent resort is had to local abstraction of the fluid by leeches, cups and incisions. This seems to have been adopted as a "compromise measure," and some seem to think it positively a "constitutional" necessity.

Thus it is recommended in typhic diseases where symptoms of local disorder exist; in affections of all sorts where, under the diagnosis, the nomenclature demands the termination *itis*, and yet the systemic condition is such as positively to forbid general venesection, or even medicinal arterial sedatives; and in a multiplicity of chronic local derangements, where other measures fail.

We think we express a general truth when we say that in typhic diseases, local bloodletting is to the full as objectionable in principle and practice as general would be. Yet the molecular changes at the part of application may prove useful, precisely as the blister proves useful, by its stimulant effect upon the organ with which it is in physiological relation—the abstraction of blood is an injurious attendant of the method, and both physiology and experience demand its discontinuance.

A large amount of blood, especially in children and adults of a hæmorrhagic diathesis, may be drawn by leeches, and then the general effect is exactly that of the old venesection. The shuddering disgust with which children and nervous adults look upon the wriggling, slimy, snaky leech, may produce a sedation—but it scarcely seems necessary to adopt this method

whilst better ones are at hand. The cupping apparatus, the scarificator and the knife respectively may produce a strong mental impression—and so did "the rope with which a man was hanged," "the powder of a human skull," and "the parings of an ass's right fore-foot," but now-a-days the latter are not frequently employed.

It is about time that this irrational and unphysiological practice should be dropped from the text-books, as it has pretty much disappeared from the actual employment of our best practitioners. The local action is better secured by those well-known methods—cold, positive or by evaporants; sedative or anodyne lotions, etc.; heat by dry or moist appliances; stimulation by rubefacients, vesicants or suppurants—the dry cup, etc., etc. Local medication possibly may exercise an "alterative" influence. Practically—in nine cases out of ten where the local bloodletting is (or rather *was*) directed, both general and local stimulation are demanded. But, *above all*, wash the diseased organ with healthy blood *from within.*

The Army Surgeon Again.—In reply to the somewhat damaging comments of one of our correspondents, our friend Prof. H. A. Johnson sends us the following "letter of credit" for the benefit of the aggrieved individual. It does credit to the kindly heart of our genial friend. The benevolence of feeling which prompts it is really refreshing in these cold-blooded times, when self-sacrificing acts of disinterested friendship are so exceedingly rare. Our sympathy with its philanthropic intent causes us to insert it most cheerfully.

[For the Chicago Medical Journal.]

MESSRS. EDITORS:—

In your May number I find an article headed "*Pittsburgh Landing*" and signed "R." in which Brigade Surgeon Robert Roskoton is made the snbject of severe criticism. I know nothing of the facts there alluded to, but I do know from an intimate personal acquaintance, with the very best opportunities of judging, that Dr. Roskoton is a highly intel-

ligent and cultivated gentleman, and that his attainments as a physician and surgeon are second to few, if any, in our country. He is a German, it is true, but he is an educated, thinking man, and a fitting representative of that class of German physicians to whose patient philosophical researches our profession is so largely indebted.

Very truly, H. A. Johnson, M. D.

A Practical Treatise on the Diseases of the Heart and Great Vessels, Including the Principles of Physical Diagnosis.—By Walter Hayle Walshe, M. D., F. R. C. P. Prof., etc., etc. A new American from the Third Revised and much enlarged London Edition, Philadelphia, Blanchard & Lea, 1862. pp. 420. From the publishers.

The late period in the month at which this work was received, must preclude an extended notice of it in this No. of the Journal.

Fortunately, the established character of the treatise, and the world wide reputation of the author, render it scarcely necessary to do more than announce the issue of a new revised and much enlarged edition. It is a standard and truly classic work. We are sure that we do injustice to no other author when we say that it deservedly stands at the head of all authorities upon the subject. To the medical student it is invaluable for its lucid and graphic descriptions; to the medical teacher for its scientific accuracy and comprehensiveness; to the general practitioner for its masterly diagnosis, and its clear and sagacious directions of treatment. In a subsequent No. we shall find occasion to glance at the contents of the book more in detail.

Braithwaite's Retrospect of Practical Medicine and Surgery. Part the Forty-Fifth. W. A. Townsend, 39 Walker St., N. Y. $2.00 a year in advance. Half-yearly parts $1.25—Postage paid by the Publisher.

This number of the well-known Retrospect is fully up to, and in some respects surpasses, its predecessors. As a *resume* of foreign advances and practice it is unsurpassed.

A Practical Guide to the Study of Diseases of the Eye; their Medical and Surgical Treatment. By HENRY N. WILLIAMS, M. D., Fellow of the Mass. Med. Society, etc., etc. Boston: Ticknor & Fields. 1862.

A book from this well-known and distinguished professional gentleman cannot fail to be both valuable and popular. Our copy was placed in the hands of a medical friend for review, and as he has not yet favored us with his comments we must waive further notice until next month.

Miscellaneous Items.—The numerous friends of Brigade Surgeon J. V. Z. BLANEY, will be gratified to hear that he is still continued at his post in this city, the order detaching him to report at Washington having been revoked.... Brigade Surgeon CHAS. L. ALLEN, Prof. of Theory and Practice in the University of Vermont, is ordered to report to the Surgeon General as a member of the Board for the examination of Surgeons of Volunteers.... Assistant-Surgeon General Wood is to act as Surgeon General of the Western Department, with head-quarters in this city. The peculiarly favorable situation of Chicago making it pre-eminently the medical centre of the North-West.... The State Examining Board are now in session and, we understand, are discharging their laborious duties with zeal and fidelity.... Dr. L. D. Boone, an old resident and distinguished practitioner of this city, has been put under arrest by the military authorities for, it is alleged, some infraction of the regulations of Camp Douglas. We trust that his detention will be but brief, unless, as we cannot believe, the offence is more serious than we have understood. No class of the community has given evidence of more fervid patriotism than the physicians.... A recent case of ovariotomy in this city proved completely successful. We hope to give the particulars in an early issue.... A case of rupture of the uterus, escape of the child and secundines into the cavity of the abdomen, the large abdominal section after the lapse of several hours, with a hopeful condition of the woman for several days,

but ultimate death from pyræmia, has recently attracted attention in the city. Details will probably be published soon.... Physicians, dentists and others who have been wheedled into buying a liquid preparation to facilitate soldering, of an enterprising vender, might have saved their quarters by recollecting that a simple solution of chloride of zinc entirely answers the purpose—the melted solder diffuses itself rapidly over the surface moistened with it....A few grains of perchloride of iron introduced by the side of an ingrowing toe-nail will, generally, so condense the tissue, that it can in a few days be readily removed, leaving a healthy surface—so says Dr. Miner in corroboration of others....There is a great demand for Staff Surgeons in the army, but it is said that, of a large number who have been examined, very few have been found thoroughly qualified. The reason is obvious—medical men of high standing and large experience do not feel like subjecting themselves to a school boy examination or the petty insolence of youthful examiners—even for the ungentlemanly pittance and position set apart for them by the laws. They had rather serve as private soldiers and carry a musket and knapsack...Dr. Horace Green, of New York City, has offered $20 to each of the first fifty volunteers in the county of Westchester, N. Y. This argues splendid profits from the throat cauterizing specialty.... Our friend, Dr. Holmes, whose first foreign letter appears in this No. of the Journal, neglects to chronicle one of the most interesting personal items, which we ourselves scarcely dare more than to breathe, to wit: that he has taken captive, without fear of extradition treaties, one of Vienna's fairest and most accomplished daughters. It is not believed, by those most intimately acquainted with the Dr., that the prisoner will ever wish an exchange, but will ever make glad one of our American *Holmes*....Under the new law reorganizing the Med. Dep. U. S. A., the appointment of Medical Inspector General has been conferred on Thomas F. Perley, M. D....Dr. Ellerslie Wallace was recently elected Prof. of Obstetrics and Diseases of Women and Children in the Jefferson Medical College.... Dr. Charles Clay, of Manchester, advocates in the Glasgow *Medical Journal*, in cases of *placenta prævia* simple detachment of the placenta from the os by the forefinger, leaving the rest to nature. According to our experience this is by far the safest, as it is thesimplest method of treatment. Statistics are immensely in its favor....Prof. C. A. Lee, writes that the London Surgeons operate more fearlessly, and with greater rapidity than Americans, but he very much doubts whether as successfully, except in particular cases.

ORIGINAL COMMUNICATIONS.

CAMP DOUGLAS.

On the 26th of June the order was carried into effect releasing the rebel Surgeons confined in Camp Douglas. The order was as grateful to the profession as it was to the released Surgeons, marking as it does a new era for the noble of our number who have gone to succor and to save our patriot soldiers. Henceforth no Surgeons are to be taken prisoners either by ours or the rebel army. Nothing could be more satisfactory than this wise, humane and judicious arrangement. It was always a mystery to me, why Surgeons were classed with the soldiery and treated and held as prisoners of war. They are strictly non-combatants, whose sole end, aim and desire is to save and not destroy, help and not harm.

It is also well known that the Surgeons of both armies are as faithful to the needy of the enemies as their own, letting their profession, as it should, raise them above the bitter strife, and fulfilling their noble mission with philanthropic devotion. Surgeon prisoners thus give no strength to those who capture, nor weaken those who lose them, and there seems, therefore, no inducement to retain them. It will induce many valuable Surgeons to volunteer who could not consent to the risks involved in the past rules of our warfare. The truly conscientious and true Surgeon when once in the field and in charge of his wounded would not be deterred by the approach of the enemy from the quiet continuance of his responsible duties, though the next minute found him a prisoner with all its horrible realities. The first duty of a man in such a situation is to those who have trusted their lives to him, and to whom moments of prompt labor may be everything. I don't think some eminent Surgeons who so gloriously fled from the

Bull's Run wounded felt well when they thought of the unmanly, cowardly, treacherous and inhuman part they had acted, even if they were safe in Washington. Their parting address to 250 wounded under their care, "Thank God, boys, you are not much hurt, and I think you will all get well," must have been very grateful to suffering and dying men, and brought that comforting response, "Thank you, Dr.—thank you," though they confess they were ashamed to tell the helpless men they were going. No subsequent approvals of Major Generals has ever made his Eminence satisfied with the unfeeling part he acted in the desertion of his brave and doubly unfortunate dependents. The probability of death would have been an additional reason why he ought to have stayed. Such necessities, I am proud to say, do not now exist, and Surgeons dare do their duty with no fear of months of imprisonment and suffering, as a penalty for their faithfulness.

The rebel Surgeons released numbered nineteen, viz:

Joseph Sandeck, Surgeon Heavy Artillery.
Sam'l H. Caldwell, Surgeon 46th Tennessee.
Thos. J. Taliaferro, Ass't Surgeon 41st Tennessee.
Delmos F. Connell, Ass't Surgeon 1st Alabama.
J. McLin Driver, Surgeon 55th Tennessee.
Mathew H. Oliver, Ass't Surgeon 17th Alabama.
Robert H. Redwood, Surgeon 21st Alabama.
Caleb Foxey, Ass't Surgeon 19th Alabama.
Elisha G. Greenlee, Surgeon 2d Kentucky.
Robert G. Rethrock, Ass't Surgeon 2d Kentucky.
John F. Kennedy, Surgeon 14th Mississippi.
Kelly Williams, Ass't Surgeon 14th Mississippi.
John F. McDowell, Ass't Surgeon 12th Alabama.
Robt. A. Fulton, Ass't Surgeon 7th Texas.
Thos. B. Elkin, Ass't Surgeon 20th Mississippi.
William A. Martin, Surgeon 1st Ala., Tenn. and Miss.
Michael J. Bolar, Surgeon 17th Alabama.
Sam'l B. Johnston, Ass't Surgeon, Regular C. S. A.
Jas. W. Duprer, Ass't Surgeon Light Artillery.

They were occupied in attending to the wants of the prisoners confined in the Camp. In the main they *did* well, though some of them seemed very indifferent to the sufferings of their comrades, and but one refused to do service, and that one gave way before the prospect of the "White Oaks;" though I fear if he had been put in he never would have *seen* his folly. There are several physicians still left in the Camp who are not regularly in the rebel service as such, and to such, of course, the order did not apply, though all who performed the offices of surgeons, whether regularly commissioned, were liberally released by Col. Tucker, as they should have been.

The absence of the rebel Surgeons rendered a supply necessary for filling their places. The following were appointed and began service on the 26th of June, as "Contract" Surgeons, as they are termed: Dr. Chas. G. Smith, Dr. M. O. Heydock, Dr. J. A. Hahn, Dr. Ross and Dr. R. L. Rea, all residents of this city. In addition, three young men, under graduate, were appointed: Frand Mehler, E. E Lynn and Henry Pierce.

Each of the physicians named have assigned them wards, to which they give exclusive attention, and are answerable to the Surgeon of the Post for its good management. The young men attend to Barrack duty; that is, many are taken with slight indispositions which are not severe enough to send them to the Hospitals and yet need to be treated promptly to anticipate worse conditions. They are under the supervision of the attending Surgeons, to whom they report daily after visiting their different barracks.

The rebel attendants are not assigned any duty, though they make themselves useful in prescribing through the different barracks, as their inclination leads them. The compounding prescriptions is performed by themselves, by young men found among them who have a knowledge of pharmacy, many of them being practical druggists. We furnish one principal druggist who superintends this department.

Two regiments of Infantry, enlisted for the three month's

service, act as guards. Sixty-Ninth, Col. Tucker, Commandant of Post; Dr. Brock McVickar, Post Surgeon; Assistant Dr. Hale; and the Sixty-Seventh, Col. Hough; Surgeon, Dr. J. P. Lynn; Asst., Dr. —— Goodwin. The Surgeons of these regiments confine themselves to their own sick; the duties of Dr. McVickar as Post Surgeon necessarily occupy him so entirely as to prevent his attendance on his regiment, and throws the duties on the other Surgeons.

The number of sick varies from three to four hundred in the hospitals and from two to three hundred in the barracks. There were in the hospital lists at the beginning of my term of service three hundred and twenty.

The character and variety of diseases change little. Diseases affecting the lungs and bowels, with Typhoid Fever, comprehends the list. The usual termination is about the same—death. The Grim General has recruited almost a regiment from the shattered bodies of rebel sick. The mortality is frightful. From five to twelve "fall in" every day. In my wards, containing near eighty, I contribute on a daily average only two or three; yet in some of the wards I understand they die *very fast!*

This fearful mortality can be accounted for in the usual effects of the soldier's mode of living, and in addition, in the cases of these prisoners, the change of climate. The Camp is as well ordered as it is possible to keep it; and under the efficient management of Col. Tucker, a system of drainage is being inaugurated which will undoubtedly tell on the health of the prisoners. The prisoners themselves are made to dig drains through the various parts of the Camp, directed to the lake, which will prevent the flooding of the Camp and the necessary mud. Damp, combined with cold, is the great exciting cause of disease among them. In a camp situated as this is, where water settles about in quantities and where cold or cool weather prevails, combined with the carelessness of themselves, and then let these causes act on persons used to a warm climate, and we have a key to the extraordinary amount

of disease prevailing. Many of these affected have been sick ever since they were taken at Donelson. We remember the cold and rainy weather prevailing at the time of its surrender; the prisoners were huddled together on the transports, very many without blankets, and compelled to stay the entire time from the Fort to St. Louis on the hurricane deck, exposed to storm and cold, which has laid the foundation for disease from which they will never recover. Soldiers are habitually careless of themselves. They seem to lose all anxiety for their own health when they enlist, and three-fourths of the sickness which we find among them is chargeable to their own folly. A soldier on guard gets his clothing saturated with rain, and when released, goes into tent throws his wearied body down, and, without the change of an article, sleeps. Another, with diarrhœa or dysentery, tired of his camp diet, lives on sutler's pies or half-cooked beans and bacon, and thus makes often incurable, by his own neglect and folly, what would be a very manageable malady.

One thing has struck the attention of all who have seen much of army diseases: their depressed and adynamic form. They very speedily assume, if they are not originally, a low grade. We see men who have every appearance of robust and vigorous constitutions dying of diseases and injuries which in civil practice would be considered easily curable. In amputation for moderate injuries we can have no very positive assurance of a favorable result. One of the best marked instances which has ever occurred under my notice took place in the Camp. One of our own soldiers was wounded by a rail car passing over the outside of his foot—not a severe injury by any means; mortification set in. I amputated his leg below the knee. He had every appearance of being a good subject for the operation; pulse good, fine spirits, and I had no apprehensions as to the result. The wound never made the most remote effort at healing; stitches tore out, wound dropped open, point of the flaps mortified, erysipelas confined to the flaps set in, with secondary

hemorrhage. I re-amputated in the middle of the thigh, and applied Tinc. Iron thoroughly to the flaps. This time they seemed for two or three days as though going to heal, but he sank and died at the end of the fourth day. After each operation he was put on nourishing broths, with Iron, Quinine and stimulants.

Very many die of consumption. The depressed and vitiated condition of their systems facilitate its development.

Within the last few weeks Scurvy has made its appearance, to add to the complications of cure. It is a difficult matter to control Diarrhœa and Scurvy where they occur in the same individual. The free use of fresh vegetables, which are the only help in Scurvy, aggravating the irritation of the bowels, and render their administration many times worse than useless. In such cases we use vegetable soup, in moderate quantities, with good effect, and, when the diarrhœa is not very severe, the vegetables themselves. Scurvy no doubt makes itself felt on all the prevailing diseases, Hæmorrhage from the mucus membranes being vastly more common since its appearance. As in Dysentery and Pneumonia, the moderate discharges of blood are replaced by more free ones. The occurrence of Scurvy has its usual cause of a lack of fresh vegetables. Before fresh vegetables can be obtained at reasonable prices, and just as last year's potatoes are disappearing from the market, we have the natural time for its occurrence. If potatoes were liberally used I don't think Scurvy would ever occur. We urge the free use of them, with cabbages, which are now plentiful, and the disease very readily yields. We use in these cases, also, Tr. Iron internally three times daily. There is one use of the Tinc. Iron which I regard as invaluable, and that is in its local application to the gums. In almost all these cases the gums are swollen, tender and bleeding, rendering it exceedingly painful to masticate, in this way offering an obstacle to a speedy cure. The Tinc. of Iron has an almost magical influence in curing them. I first used it in the Commercial Hospital in Cincinnati, 1855, after trying

Nitr. Silver, Sugar of Lead, Alum, &c., and was delighted at the surprising and sudden change it would produce—many of the very worst cases being cured in four or five days. I apply it pure to the gums, inside and out, with a camel's hair brush, thoroughly three times a day. It is rather disagreeable, but patients do not long object to it. It is amost as effectual in cases of salivation as scurvy, though not quite so prompt. We use also lemons and Citric Acid drinks. Chlorate of Potash has been somewhat used, but it seems to add but little to the haste of cure, if any.

The influence of Scurvy in this, as I have noticed before, seems to show itself in a susceptibility to the effects of Mercury. One of the vilest salivations I have ever seen occurred to a man who came into my ward, caused by the application of the patient to himself of a small amount of Ung. Hyarg. for body lice. He had never been ptyalized before, and so great was the swelling of his face and tongue that he has not spoken for near two weeks.

R**

FOREIGN CORRESPONDENCE.

EXTRACTS FROM A LETTER FROM E. L. HOLMES, M. D.

Vienna, July 15, 1862.

Probably few medical students or even practicing physicians, who contemplate visiting the European hospitals for the purpose of professional study, form a correct idea either of the advantages which they may really enjoy, or of the peculiar difficulties which they will encounter.

It was my good fortune, seven or eight years since, to spend eighteen months in Europe, visiting principally the hospitals of Paris and Vienna; and I am now revisiting the same hospitals for a few months, partly for pleasure and recreation and

partly for professional improvement. Possibly the experience of my former residence here, together with an experience of seven years of quite active practice, may now enable me to offer the readers of the JOURNAL an intelligent statement of the advantages and disadvantages which the members of our profession will usually meet while pursuing their studies in the French or German hospitals.

The time is past when the mere fact that a young man had "followed the hospitals" of Paris or London, was alone sufficient to establish his reputation as a physician, in almost any city in which he might commence practice. A visit to Europe was then regarded of so much importance, because at that period in the history of medical science in America, the whole country offered scarcely any opportunity for the student to investigate disease, except as described in books. To do this he was obliged to visit Europe, whose hospitals presented so many examples of every form of disease. Fortunately, during the last quarter of a century, the facilities in our large cities for the study of disease at the bed-side, have become very great, and the time is undoubtedly not far distant when these facilities will be all the student can desire. Our own city of Chicago may already be justly proud of the reputation of its medical teachers, and the friends of professional culture in the Northwest may be encouraged at the increasing opportunities for clinical observation, which the student may now enjoy, and yet there are certain benefits connected with a course of medical study in Europe, which will for years render it desirable for every physician, if possible, to spend a year or two in clinical observation abroad.

There are perhaps two great advantages which the student secures in the large European cities. In the first place the number of patients in the hospitals of these cities is almost incredibly large, and furnish an unlimited amount of material, from which numerous examples of every form of disease may be presented to the observation of the student. The second advantage which the American student will find, de-

pends upon the fact, that here, more than in the United States, there are a larger number of instructors in special diseases, who have for years been in the habit of teaching at the bed side. There are in the United States many of our own profession whose knowledge, perhaps, in any special department of medicine, is sufficient for this. In addition to knowledge, the successful clinical teacher must possess a faculty of imparting his knowledge, which can usually be acquired by practice alone.

In Europe there is no prejudice againt specialists as in the United States; the most distinguished men are those who have made special classes of disease the study of their lives, and are eminently capable of teaching in their respective branches. There are certain reasons why specialists in the United States have not received the confidence and encouragement of the profession at large. Unfortunately with us, so called specialists are almost always not only ignorant of medicine in general, but also of the particular class of diseases in which they pretend to have acquired peculiar skill in treatment. Medical science is already too broad for any mind to attempt to grasp all that is known in its various departments. The physician who has acquired a knowledge of the general principles of medicine, and who then devotes himself to the study and treatment of one class of diseases will certainly excel, in his particular branch, others who devote their time and energies to the whole range of professional labor. We need but turn to the history of the progress of medical science, to be assured that our profession is indebted almost wholly to specialists, for every great discovery in the science, and for every great work in the literature of medicine. And they who have become most distinguished in Pathology, Anatomy, Physiology, and who have acquired a world wide reputation for their skill in the diagnosis and treatment of the chest, of the eye or ear, of the nerves, or of any special organ, have been those who have made the study of comparatively a few medical subjects the object and aim of life. And, notwithstanding the existing

prejudice, the works of these specialists are received as authority, by those even who are most disposed to discountenance a similar division of labor in our own country. Undoubtedly in a few years this division of labor will be regarded with as much favor by the profession generally in our own country as in Europe.

Briefly then, the great advantages which the student will enjoy in some of the European cities, are these:—He will make the acquaintance and receive the instruction of physicians who, if possible, not only know all that human skill and ingenuity has as yet brought to light in their respective departments of medical science, but are also through long experience, accustomed to lecture at the bed side. Moreover, they have at their disposal a very large number of cases to illustrate every point connected with each disease.

The principal difficulty which most American students will meet in pursuing their studies in Europe, consists in the fact that the instruction is given in a foreign language, and every student who is without previous discipline in the study of language, should know that generally it is no small task to acquire a sufficient knowledge of either French or German to enable him to follow the ordinary clinical lectures. Few young men can do this in less than six months. I am fully convinced that most students who are unacquainted with either of these languages, and who intend spending but a year in Europe, will derive much more benefit in devoting their time and money to study in the hospitals of Great Britain or in those of our Eastern cities. In my next letter I will describe in detail the splendid hospitals of this city, its numerous churches, its splendid Pathological museum, its large number of private courses of instruction, and enumerate the peculiar advantages which Vienna offers the student more than any other city.

CAMP DIARRHŒA.

By T. H. WALKER, M. D., Chicago.

While I was engaged in the army before Corinth, diarrhœa prevailed as an epidemic throughout the camp, rendering the soldiers unfit for duty. I had a large number of patients under my charge, the majority of the cases being complicated with Intermittent Fever, producing great prostration and difficulty in treatment.

The disease was usually ushered in by loss of appetite, irritability of the stomach, frequent vomiting, and intermittent pulse. The evacuations from the bowels were very frequent —often as many as thirty in the day.

The treatment adopted by the Surgeons was very diverse and unsatisfactory.

By close examination, I found that the alimentary canal was loaded with undissolved ingesta. There was pain arising from the irregular and violent peristaltic action, with soreness throughout the course of the large intestine, the frequent stools accompanied by distressing tenesmus. The secretion from the liver was irregular, often excessive and of an acrid nature. The skin was sallow and the tongue heavily furred; the pulse compressed; frequently headache and disturbed sleep.

The causes are various, the hepatic disorder apparently often secondary to the intestinal irritation—apt to be provoked by excessive use of stimulants. Exposure to cold and wet, especially in the fall months. In this case there is usually less pain, unless it passes into dysenteric diarrhœa from the presence of aggravating influences.

The primary step in treatment is to remove the cause if it can be ascertained. My attention was first directed to the sanitary condition of the camp. I caused the tents to be rolled up, aired and dried, and all offensive matters to be

removed; and both the invalided and healthy soldiers to be washed, and their clothes to be changed and cleansed as often as the conveniences of the camp would admit.

Next I looked to the food and cookery department, which I found extremely faulty, soldiers often neglecting to more than half cook their rations, with resulting indigestion and passage of the crude mass into the intestines, exciting and intensifying the morbid action. There was not much choice in diet to be had in camp, but by proper attention to its preparation a great barrier to the return of health was surmounted. The means for making a nourishing and suitable soup are always at hand in camp: meat, beans, rice, and even potatoes, which, by the skill of any competent cook, can easily be made into a soup perfectly harmless and wholesome.

So far as medication was concerned, I usually commenced my treatment by giving large doses of Sulphate of Magnesia to wash out the contents of the bowels. I then administered Ipecac, Opium, Hydrarg. Cum Creta and Quinine, the proportion of each varying with the peculiarities of each case. In the course of twenty-four hours the evacuations would assume a dark color, and convalescence rapidly ensue. The Ipecac and Opium were given in moderate doses. The Hydrarg. Cum Creta appeared to act in the most salutary manner in cases where Calomel would irritate excessively. The Quinine, when there was intermittent complication, when given alone did not fail to aggravate the difficulty, but in the above combination had a most happy effect.

Of eighty-eight cases under treatment at one time, the whole were reported fit for duty in seven days from the commencement of the treatment.

The Brigade Surgeon, who visited the camps with reference to the presence of this scourge, was so strikingly impressed by the marked superiority of this treatment to that relied upon by others, that he gave it cordial and high approval and recommended it to the other Surgeons. Previously too much reliance had been placed on Calomel, Opium and

astringents, and, worst of all, upon alcoholic stimulants; but since then Sulphate of Magnesia takes the first rank. One hundred and fifty barrels of it were ordered for Gen. Grant's division by the Medical Director, to be used as above indicated.

The writer, in concluding this hasty sketch of the method relied upon by him in opposing this "scourge of the camp," begs leave to say that while he does not claim any novelty in it, or new discovery, yet the application never has, to his knowledge, previously received the high place in the confidence and practice of the Army Surgeons which the experience above recorded showed it ought to receive.

July 30th, 1862.

SELECTED.

THE LESSONS IN THE SURGERY OF WAR.

BY RUFUS KING BROWNE, M. D.,

BRIGADE SURGEON U. S. ARMY, AND CHIEF MEDICAL OFFICER AT NORFOLK, VA.

About five hundred of those wounded at the battle of "Fair Oaks," who reached Fortress Monroe on transports, were examined by me, and I propose to mention some of the incidents during my attendance on them while at the Naval Hospital, which, particularly, engaged my attention. A large proportion of these, I think a majority, were wounded in the lower part of the body, showing that their enemies had practised the lesson "fire low." The wounds of a considerable proportion, which had laid some hours upon the field, had become a *nisus* for the larvæ of flies, and were occupied by myriads of these at various stages of development, and this was the same where the raw surface was of any greater extent than that pertaining to orifice of entrance or exit, whether it had been made by a missile or by the surgeon's knife in amputation. Nearly all the amputatated cases were at the thigh, and were primary operations which had been very creditably done. Of the

five—four of which were primary—which I particularly noted and cared for, three did well and are still doing so. One of the other two had the secondary hæmorrhage, when the femoral was ligated on the eleventh day (so near as I could ascertain) after the amputation, and died the fourteenth day; the other, amputated by myself on the ninth day after the receipt of the wound (a compound a commuted fracture of the femur, extending to the knee-joint), died on the sixth subsequent day, without the supervention of secondary hæmorrhage. I had hoped better, though he was of poorly nourished body and comparatively infirm constitution. Of the three which are doing well, one had secondary hæmorrhage which required ligation of the femoral.

There was one case of amputation of the leg, which confirmed me in my previous view, that where the comminution of the bones of the leg forbids the attempt to save, and requires amputation above the lower third, it had better, as a rule, be done at the knee-joint, and include a thin slice of the femur. In this case, the operation (primary) had been done just below the line of the upper and middle thirds. The thin layer of soft tissue corresponding to the anterior flap, had retracted so far as to bring its apex very nearly into a line with it original base, leaving the end of the protruding bone six or eight lines beyond it. In this case, when it became apparent that the bone must be shortened and covered by the formation of a new flap, I proposed re-amputation at the knee-joint, but by the advice of the surgeon in charge, I operated about two and a half inches above the first. The tissues were found to be morbidly vascular, and though the cut surfaces were not brought together until two hours after, when all oozing had ceased, on the fifth day ligation of the femoral was performed and on the fourth subsequent day the patient died. All these cases were flap operations, as were those I did myself, and all but the latter were infected with maggots. I found no means of removing these except a move at a time by the forceps. Various solutions were tried for the purpose—dilute sol. nitric acid, etc., but were all wholly ineffectual. It occurred to me that quassia, the only bitter tonic which destroys the fly, might destroy the larvæ or disperse them when developed, but I could not obtain this article. Remarkably great in all these amputated cases was the amount of suppuration. In one the drainage of two days amounted to one pint. This, of course, as compared with injury, which consisted merely of the canal formed by the track of the ball. In these latter it

constantly seemed to me that there was a very decided difference in the amount of suppuration, whether the wound ran nearly transversely, or nearly longitudinally to the course of the muscles and apeneuroses—there being most in the latter case. But I noticed but little difference in this respect where the wounds respectively involved comminution of the bone.

In none of the amputated cases had the flaps been kept in apposition by union, though in a large number of cases attended to, including the preceeding five, some were progressed in granulation. [I was induced to think that the transportation to a distance from the place of wounding, of amputated cases, or capital cases of the extremities, particularly if such transportation consist of more than one change of conveyance, was not the best surgically. The contrary is undoubtedly the case with sick, or perhaps slightly wounded or injured men. But this opinion is not due to the increased danger during carriage of recurrent hæmorrhage, for this I think unsustained.]

In the dressing of these cases I felt that some simple means should be devised for lifting up the under flap, which constantly tends to weigh away from the upper. All that is required in the case has hitherto been thought to be fully accomplished by the supporting roller about the base of the flaps. But this only keeps the cut surfaces closely pressed. But with this, if the under flap be heavy, it will weigh downwards and backwards, together with the upper which is kept fast to it, so far frequently as plainly to show beneath the latter the whole contour of the cut of the femur. This lifting may be done by passing adhesive straps from a point beyond the base of the flaps, and bringing them forward in one strand to hang upon some elevation at the foot of the bed. The stump up to the point at the base of the flaps where the bevelled form commences, rests upon the opposite cushion. These will, moreover, serve to gently raise the stump from the bed at the time of dressing, avoiding handling, one of the most important of all purposes to the surgeon, and by it also the cushion may be adjusted with the most comfortable nicety.

I am inclined to think that it is preferable to make the posterior stump thinner—not shorter—than usual. The great mass usually left in the lower flap, when pressed up to admit the sutures, forms rounded prominences, not favorable to the object of bringing the surfaces in apposition.

Whoever attended to these wounds with a reflective mind, could not fail to be struck with the consideration that the prevention or arrest of suppuration or a reduction to some at-

tainable minimum, was the paramount consummation. It is not the *amount of pus discharged*, which is so contrary to all the physiological conditions of healthy tissue in the patient for this only indicates the extent of the original morbid irritation which inaugurates the action of the tissues in the suppurative process. This suppuration consists in the enormously rapid multiplication of cells, which immediately and in virtue of the very same conditions which produced them, break down, or as we term it "liquefy."

To reduce or destroy this irritation—to the point where cell multiplication does not exceed normal "granulation"—is the desideratum. *Disinfectants* do not contribute to this end, though they do subserve equally important objects.

The medication in all the preceding cases was done in accordance with my idea of supporting or protecting the *nervous system*—a different thing in my estimation from either supporting or stimulating, i.e. *nourishing* the body. It consisted of quinine and morp. combined, with mild tonics. Where the pain of the cut or lacerated surface was excessive, the latter or pulvis opii was gently scattered upon it with immediate relief. Under the circumstances of such wounds, I am confident that the *assimilation* of however nutritious substances, is nearly or quite precluded by the physiological conditions, and hence nutritious diet is of little avail.—*American Med. Times.*

CLINICAL NOTES ON INTEMPERANCE AND ITS PREVENTION.

By ROBERT DRUITT, M.R.C.S., London.

I have hitherto spoken of the bodily sensations which lead to intemperance; but the mental are of infinitely greater consequence. And here let me notice the most cruel and unreasonable neglect with which minor mental affections are treated. I speak not of what is formally called "insanity,' but of the nervous wretchedness, the bad spirits, the dejection and groundless fears of the feeble and hypochondriacal. If a woman have a pain in the side, or a spot on the skin, her husband will immediately seek medical relief for her, though her bodily sufferings be but slight, and her mental none at all. She may be essentially as cheerful as ever, spite of a little

pain, which she readily bears. But let the same woman be ill in that which constitutes her very inner self; let her thoughts be gloomy, hopeless, and self-tormenting, so that her life is as miserable as if she were a prey to remorse for the most grievous crimes, and then what is done for her? Either she is despised as a fool, and told so, or she is argued with; just as if any one would entertain irrational fears if they were capable of being argued away. Or she is scolded for sinful despondency, and told that she is wicked to despair. Or she is told to drink; to have a glass of port wine when she feels low—or all these things may happen to her in turn, till, at last, the husband coming home unexpectedly some day, finds his wife drunk! Christian friends then wonder how a lady could so degrade herself; all the blame is laid on the victim's head, and not one word said about those who have so cruelly neglected her, through utter ignorance of mental physiology, and blindness to the things going on under their eyes.

A man lately brought his wife to me, saying, "Really, sir, I don't know if it is of any use to ask you to see her; there is absolutely nothing the matter with her, but she is such a fool. She is moping and crying all day, with nothing on earth to cry about. She has every comfort that a woman can have, and yet is never happy, though I keep telling her how wicked and foolish she is."

I once saw a lady who had been found out in a drunken fit. Her relatives were sent for. Her mother and aunt came; the former thrashed her with her fists; the latter pounded her with texts of Scripture, such as, "The wicked shall be turned into hell," and about "a lake of fire reserved for liars and drunkards," etc., and this to a poor wretch, who fled to the gin bottle for relief from inward misery that was uncared for by those about her, and so timid, as she told me, that she had scarcely courage to give an order to her own maid. From what I have seen of the secret solitary drinkers, it is vain to attempt to terrify them with notions of punishment, present or future; there is no state that they can conceive of more wretched than that which exists within them, and for which they seek a short respite in drunkenness.

Mental suffering is far worse to bear than bodily, and it is almost as common, especially amongst the educated classes. It is really the source of that disposition on the part of educated and refined persons to encourage quacks, of which regular practitioners complain. When regular practitioners cease to utter the formula, "Madam, I assure you your com-

plaints are purely nervous," and with that formula to dismiss the case as unworthy of notice, then they will have a right to complain that their patient seeks from a quack the solace which they will not stoop to administer.

Of the forms of mental suffering, short of what is called "insanity," yet frightfully common, more distressing than any bodily illness, more incurable, and most pernicious—in tempting women to drink, I have already mentioned *nervousness*. The best description of it was given by Charles Lamb. "Business," he says, "which I once used to enter upon with some degree of alacrity, now wearies, affrights, and perplexes me. I fancy all sorts of discouragements, and am ready to give up my occupation which gives me bread, from a harassing conceit of incapacity. The slightest commission given me by a friend, or any small duty which I have to perform for myself, as giving orders to a tradesman, haunts me as a labor impossible to be got through." To the mental are added bodily symptoms of the same sort, as the shaking hand and unsteady sight. These symptoms may be caused by bodily weakness alone, by worry of mind, by use of narcotics, and more especially of alcohol, by green tea, and equally by too much sleep. The hours during which they are most tormenting, are between early morning and the mid-day meal. The difficulty in relieving them arises from the difficulty of coercing a feeble stomach, reeking with the dregs of yesterday's mal-assimilation, to receive and digest food early in the day. Hence, wine and spirits are fatally tempting. Of this again, when I speak of treatment.

Whoever lives without risk of suicide, has passing through his brain during waking hours an easily flowing succession of thoughts, the result of which is a comfortable degree of self-reliance, self-satisfaction, and self-respect. But illness, anxiety of mind, and self-reproach at misfortunes unavoidable or not, may enfeeble the brain, and produce a train of thought which is positively painful, and requires effort to bear patiently. They next enfeeble those powers by which we distinguish between matter of fact and matter of imagination. There is many a case of ill-nourished brain seen in daily practice, between which and melancholia the line of demarcation is not well marked.

In May, 1854, a medical friend called on me, bringing with him the last volume of the Medico-Chirurgical Transactions, which he opened, and asked me to look at a paper by Dr. S. Merriman "On Inversion of the Womb." He looked as

wretched as possible, and told me that a very important patient of his, whom he had recently attended, and whose good word was of the highest consequence, had met with this accident, and that he was afraid to reveal it, but that out it must come soon, and that the patient would die and himself be ruined. Of course I condoled with him, and asked particulars. But the odd thing was that I could get no particulars; the inversion had been taken for granted. So I advised my friend, instead of going and confessing to the husband, to take an opportunity of examining the patient, to find whether the womb were really inverted or no. He did so, and found that he had been disquieting himself about a mere fiction of the imagination. He had been suffering from loss of rest, irregular meals, and great anxiety of mind, and had got his brain into so feeble a state that it was enslaved by an hallucination. Rest, good living, and wine speedily cured him; but it is a singular fact, that two years later he got the same crotchet into his head respecting another patient about whom he had been much harassed.

This case may be an example of the morbid fancies which haunt the brain of the wretched hypochondriac, unable to weigh and dismiss them with a clear judgment. The commonest is the notion that other persons' words and actions are intentionally offensive. In such cases, whether the evil be great or little, alcoholic liquids strengthen the judgment, change the current of thought and render it agreeable, beget a comfortable sense of self-respect, and enable the patient to bear his woes. Hence, the use of them may be, first, a dangerous remedy; next, an inveterate aggravation of the original malady.

The process by which *grief* leads to drinking is short and easy as the path to Avernus. There is no doubt but that grief—the condition caused by the news of some great calamity—produces effects on the brain of a physical character. The sufferer feels a sudden rush of blood to the head; a faintness; a dull pain; a sense as if the head would burst and the eyes start from their sockets; a stunned feeling, followed by a soreness; and inability to control the thoughts, which roll round and round in one distressing circle, without the power to dismiss them and entertain others. Between a man who receives shocking news and one who receives a blow from a stick, there is this difference, the physical injury is over at once; the mental persists and may grow in virulence. To the mental torture is soon superadded bodily illness; and the

effects of grief which I have seen have been in one of these forms.

There may be, first, the effects of exhaustion—of the great wear and tear of the brain. This was well described to me some time ago by a widow. Intense occupation in nursing a sick husband had ceased suddenly with his death. "When the house is shut at night," she said, "and everything quiet around me, then my sad thoughts come pouring down upon me, and go on, round and round, and over and over again. After a time, as I lie tossing about, a most horrible faint sinking comes over me, as if my heart and inside were clean gone, and I was sinking into the earth, bed and all. Then I must have brandy. I get out and take it, and sleep and feel better; if I do not, I am good for nothing the next day."

The second effect of grief is shown in those disorders of the blood which seem to result from admixture with it of organic matter, the result of nervous wear and tear. The usual symptom is sick headache; stunning headache, with vomiting of bile, or of acid stuff, or both, and large elimination of uric acid by the kidneys. Boils notoriously may be induced by grief; so may gout. I once was told by a man that a fit of vexation from disappointed love had settled in his nose and produced carbuncle there. It was quite true. There is much reason, too, for believing that grief may conduce to cancer.

Thirdly, there are more or less permanent disorders of the nervous system. There is a form of hysteria in which pains are, as vulgarly said, "similated." I recollect seeing a young lady bathed in tears, and complaining of violent pain in the side. She expanded her chest in such a way as to show that the cause of pain was not seated in the side; but the mind was deeply wounded; she was ill; sympathy was a necessity to her; the pain was but a reflex effect of a broken heart. This, as I humbly conceive, is the key to the obstinate, inscrutable, and apparently utterly abnormal pains and local complaints of hysteric young women. As a sailor will feel pain in the legs which were cut off years ago, as disease of the nervous centres may cause pain in the extreme nervous branches, so a mind deeply wounded, especially with a grief that must be hidden, produces some outward local pain.

Hence the obstinate pain in the knee, or ankle, or spine, the spasms, and other symptoms of severe hysteria. I have seen cases, from long-hidden grief, of utter fatal atrophy of body and imbecility of mind; such patients might have been saved

by a greater use of wine, under medical direction; but yet might probably have become confirmed intemperates. Many a man lives as an intemperate, who, but for alcohol, would have died. In counting up the evils of alcohol, it is but fair to substract from them those which it finds and alleviates.

Grief fills the mind with images which are positively noisome. *Stagnation*, in which the mind is simply not supplied by any images at all, is as bad or worse. Such is the condition of persons of middle age who have lost hope; whose schemes of life are blighted; who have failed in their calling, and are too old to choose another. Such are the physicians at sixty who hate the profession, and wish they had gone to the bar; such the barristers who "always felt they had a taste for physic;" and the soldiers who say that the service is clearly going to the devil, and that only incompetent fools get promotion. Such are, too, many of the inmates of almshouses, refuges, and colleges for decayed professional men or their widows. Such are many of the single women of limited income who live in those protestant convents, the boarding-houses that abound in the suburbs of London. Such are the shepherds in the Australian bush, who, after months of monotony, must go and get drunk, to save their lives by a little excitement.

Of the effects of anxiety of mind, the following may be an example. A patient writes: "I received intelligence which caused me intense anxiety, which lasted several days. Absorbed though I was, I could not help noticing my bodily sensations. After a fit of more anxious musing than usual, I had such singing in my ears, giddiness, etc., feeling as if all my flesh was asleep. My feet felt partly as if they had pins and needles, and partly as if there were wool inside the soles of feet. And such a craving for food and drink!"

But there are certain perturbed states of the nervous system which directly lead to drinking, and which seem not to be engendered by outward circumstances, but by some congenital defect in the original formation or in the development of the nervous system. Such are the cases which may be called "primary hysteria," and (with certain reservations) "moral insanity." There are young persons of either sex, whose nervous system is in such state that the ordinary occupations and surroundings which give happiness to others, give none to them. They are wretched and dissatisfied, and seek for some additional means of excitement. That excitement is found in two modes—in tormenting others, and indulging themselves. There are children who from tender age do the most malicious

and mischievous acts, merely to gratify themselves. Such was a young lady who, when on a visit, hid the dressing-case of another visitor; such are the girls who set fire to houses; and others, of whom a good example may be cited—the unfortunate and notorious girl to whom the name of the "Female-Jesuit" was ignorantly and slanderously given, and whose history was published with ludicrous simplicity by a miserable preacher upon whom she had quartered herself, and whom she deluded and tormented for months. Not long ago, I was consulted about a young lady, rich and good-looking, but restless, always craving for excitement; able to have almost every indulgence that money could procure, and to travel wherever she liked, yet secretly a drinker.

Here I must stop for the present. Let me sum up by saying, that as of bodily ailments, so of the minor mental perturbations met with in common life, there is a vast amount whose natural tendency is to seduce into intemperate habits, because alcoholic liquors give temporary relief. Such mental ailments are too often treated by scolding, argument, or *le prêche.* They ought to receive the most refined and careful medical attention; and if they did, many a case of suicide, insanity and drunkenness would be prevented.—*Med. Times and Gazette.*

ACTION OF ALCOHOL AS AN ALIMENT IN DISEASE.

Dr. F. E. Anstie, Assistant Physician to the Westminister Hospital relates, (*London Medical Review*, April, 1862,) four cases, one of pericarditis, two of pneumonia, and one of pleurisy, illustrative of the action of alcohol as an aliment in disease. These cases, he states, "are by no means the only ones which I could quote from my own practice, which might serve to throw light on the question whether alcohol does or does not act as a foyd. I have selected them, because they are the only cases of which I possess notes in which a crucial experiment was performed, viz: the administration of no food (for none other could be retained on the stomach) but alcohol, in the shape of wine or spirit, mixed with a little water. I think my readers must allow that there is no imperfection in the conditions of the experiments which is at all important;

and if this be so, the evidence which they afford is very important. It may be briefly summed up thus:

"1. Alcohol is capable of sustaining life, in the absence of all other foods, for many days.

"2. During acute diseases, alcohol is sufficient, without the use of any food, to prevent emaciation of the body, and also the extreme lowering of muscular strength, which would render the period of convalescence tedious.

"3. Given in acute disease no amount of alcohol which the exigencies of the case require will cause inebriation; on the contrary, delirium, unless it depend on inflammation of the brain, may be always checked by the administration of alcohol.

"That the demand of the system for alcohol in acute disease is in inverse ratio to the power of assimilating other foods.

"To these conclusions I may add some others, to which I am led, not by the above cases only, but by a very large number of others also.

"1. It is not true that alcohol may only be given with advantage, in acute disease, when the skin is already moist and perspiring. On the contrary, nothing has been more common in my experience than to see patients whose skin had previously been dry and burning hot, break out into a refreshing sweat after some hours of steady perseverance in the administration of alcohol in two drachm doses every half hour.

"2. It is not true that the treatment of acute disease by large doses of alcohol involves any danger whatever of laying the foundatian of habits of drunkenness. If the alcohol has been judiciously administered, in sufficient quantities, and yet not too large, the moment that the appetite for ordinary food returns the desire for the temporary substitute will cease. I fully agree with the important remarks recently made on this subject by Dr. Druitt. It may be laid down as a rule that, both in disease and in health, the taking of so large a quantity of alcohol as, under the circumstances, is sufficient to produce intoxication, tends to produce a craving for the stimulus; and it is equally certain that the timid and inadequate use of stimulants in acute diseases tends to produce a similar *bulimia*. But the taking of even a bottle or two bottles of brandy a day, when the case requires it, does not engender the smallest taste for alcohol after the return of health. And the daily use, during health, of a quantity of alcohol which is insufficient to produce any, even the earliest, symptoms of inebriation, does not occasion the smallest craving for an increase of the dose."—*Am. Med. Jour.*

PATHOLOGY AND TREATMENT OF JAUNDICE.

Dr. George Harley read a paper on this subject (May 13, 1862) before the Royal Medical and Chirurgical Society.

It is universally admitted that the facility of the diagnasis of jaundice is only equalled by the obscurity of its pathology and the uncertainty of its treatment. In this communication, therefore, the author set about unravelling the nature of the various morbid conditions which give rise to it; and pointed out how, notwithstanding the seeming discord, they could all appropriately come under the two common heads of "jaundice from suppression of the biliary function," and "jaundice from the reabsorption of the secreted but retained bile." Moreover, Dr. Harley showed that the pathology of jaundice resulting from suppression is totally different from that arising from obstruction: and, consequently, that a line of treatment which would be appropriate and beneficial in the one form, would be detrimental, if not actually hazardous, in the other. Fortunately, however, the author pointed out a new method of distinguishing the two forms of the disease when all the ordinary means of symptomatic and physical diagnosis prove unavailing. The method consists in analyzing the urine, which, he finds, contains different morbid products according to the particular form of the disease. Thus, for example, in jaundice from suppression the urine contains only those biliary ingredients which exist performed in the blood. In jaundice from obstruction, on the other hand, the urine contains, in addition to these, the materials generated in the liver itself, and which have been reabsorbed into the circulation from the distended gall-bladder and ducts. A simple mode of distinguishing the two conditions is, to add to about two drachms of urine half a drachm of strong sulphuric acid, and a fragment of loaf sugar the size of a pea. If at the line of contact of the two liquids a scarlet or purple color is produced, it proves that the acids of the bile are present, and the case may consequently be put down as one of jaundice from obstruction. On the other hand, if no bile-acid reaction, but merely a browning of the sugar, be observed, the case is in all probability one of suppression. Dr. Harley pointed out, however, that care must be taken not to confound the two cases; as jaundice from obstruction, especially the severe form, often merges into jaundice from suppression. The author also confirmed Frerich's statement regarding the presence of tyroeine and leucine in the urine of acute atrophy of the liver; and further stated that he had also found these substances in the urine of chronic

atrophy, so that their presence might aid in the diagnosis of the latter as well as of the former condition of the hepatic organ. Several cases were cited illustrating the value of the different methods of diagnosis; and the author concluded by pointing out the class of cases in which mercury and other remedies were likely to be beneficial, and where they were likely to do injury. He specially recommended the employment of benzoic acid in jaundice from suppression, and inspissated bile in that arising from obstruction, in which latter class the patient frequently dies from slow starvation, in consequence of the absence of bile in the digestive process causing imperfect assimilation of the food to take place. Dr. Harley also called special attention to the fact that bile, as now employed, more frequently does harm than good; for, when given along with the food, instead of aiding the digestive process, it actually retards it by interfering with the action of the gastric juice. If, on the other hand, bile be administered, as the author proposes, at the end of the stomachal digestion, it acts (as in the healthy organism) on the chyme, and renders it fit for absorption. In order still further to insure this desirable object, Dr. H. has had bile specially prepared and put up into capsules, which are not readily acted on by the gastric juice, but which, on being dissolved in the duodenum, allow the bile to come in contact with the food at the proper moment, and thereby enable the physician to imitate nature, and supply an important element to the system. The communication was well illustrated with preparations and drawings.—*Med. Times & Gaz.*

RUSH MEDICAL COLLEGE.

SUMMER SESSION, 1862-3.

The Fourth Regular Summer Course of Lectures in connection with the above Institution, will commence two weeks after the close of the Regular Term, and continue Four Months. The course will consist of daily Lectures at the College, Recitations and Clinics at the Hospital and Dispensaries Every facility will be afforded for Clinical instruction at the City Hospital, Eye and Ear Infirmary, and College Dispensary, the course throughout being practical and complete. Fees for the course, $10, to defray expenses. An atomical material furnished in abundance. Circulars will be issued in the Spring. Any further information may be obtained by addressing H. W. Jones, M. D., Chicago, P. O. Box 2052.

LECTURERS.

H. W. Jones, M. D., *Obstetrics and Diseases of Women and Children.*
J. P. Ross, M. D., *Clinical Medicine.*
Edwin Powell, M. D., *Operative Surgery.*
E. L. Holmes, M. D., *Ophthalmology and Diseases of the Ear.*
Chas. G. Smith, M. D., *Diseases of Genito—Urinary Organs.*
Ph. Matthei, M. D., *Chemistry.*
J. P. Lynn, M. D., *Anatomy.*
Geo. K. Amerman, M. D., *Surgical Anatomy and Clinical Surgery.* [aug-6m]

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ON THE EXHIBITION OF FOOD IN TYPHOID FEVER.

The following remarks made by Mr. Herard, in a clinical lecture at the Hotel Dieu, at Paris, are of particular interest at the present time, especially to the medical officers of our army hospitals:—

"The treatment of typhoid fever is of course different according to the theory adopted on the nature of the disease. The practitioner who views in typhoid fever follicular inflammation of the intestinal tube, an ulcerous affection of Peyer's glands, and consequent absorption of poisonous fluids calculated to induce a septic condition, consistently prescribes antiphlogistic remedies in the incipient stage, and tonics in the more advanced period of the disease. Likewise, those who conceive that the decomposition of the local secretions is the primary cause of the infection of the system act consonantly with their theory in systematically exhibiting emeto-cathartics and laxatives. In these opinions, however, M. Herard does not participate; while taking into serious account the intestinal eruption, which, like that of smallpox, induces a certain amount of circumambient inflammation, he cannot admit this to be the proximate cause of typhoid fever. No concordance can be traced between this anatomical change and the general condition of the patient, the gravity of which must be acknowledged to be entirely independent of the local injury. Hence

the latter cannot be taken for a guide in the choice of the medication most appropriate to a fever in which the collapse of vital power and the obvious tendency of hemorrhage and mortification point most distinctly to a primary alteration in the composition of the blood. M. Herard does not deny that an emeto-cathartic may be proper to remedy the foul state of the primæ viæ, so common in the early stage of typhoid, but he can neither concede to aperients, to venesection, nor to local bloodletting, the privilege of being the exclusively appropriate modes of treatment of the disease.

"In typhoid fever M. Herard proceeds as follows :

"In moderate, and *à fortiori* in mild cases, he refrains from any active interference calculated to debilitate the patient, and to cause the disease to assume the dangerous form which justly occasions so much dread. M. Herard prescribes an emeto-cathartic, one or two doses of saline aperients, a few baths if the skin be very hot and dry, and wine and water. Baths restore the functions of the skin, and usually induce sleep. In the adynamic variety he resorts to tonics, stimulates the system with Malaga or Bordeaux wine, either in drinks or in enemas, prescribes from half a drachm to a drachm of powdered cinchona bark, in coffee without milk, and also recommends various stimulants, such as musk, camphor, acetate and carbonate of ammonia. He causes, at the same time, the eschars to be covered with powdered Peruvian bark, and requires from the nurses the most strict attention to cleanliness. In the ataxic form, the most fatal of all, bloodletting, leeches, blisters, are unavailing ; all remedies seem powerless. In order, however, not to appear inactive in cases of such dire gravity, he prescribes stimulants, dry cupping of the extremities, blisters to the nape of the neck, and cold effusions cautiously administered. In the thoracic form, which this year has been the most prevalent, blistering and cupping, with scarification, are the remedies which M. Herard has chiefly resorted.

"The above is a brief summary of the treatment appropriate to typhoid ; but in the management of the disease the all-important, the capital question is that of food.

"Despite the wise precepts of Hippocrates, said M. Herard, despite the recent researches which have only confirmed their value, we are still all more or less influenced by the now exploded doctrine of irritation. The terms fever and food still appear to imply a contradiction, although it is but too certain that in typhoid prolonged abstinence leads to the most desastrous results.

"Some ten years ago, M. Herard was in attendance on a lady suffering from a moderately violent attack of the malady under consideration. Cerebral symptoms having set in, a consultation took place, and an eminent professor of the school of medicine recommended absolute abstinence from food, and the daily exhibition of one or two glasses of seidlitz water. The latter part of the prescription M. Herard took upon himself in some degree to modify, but the abstinence was strictly enforced. After two or three weeks' treatment, the pulse rose from 110 to 120, nocturnal agitation set in, with wandering, delirium, vomiting, and diarrhœa. On the following days the frequency of the pulse increased to 145, vomiting became incessant, the diarrhœa incoercible, the delirium constant; the tongue was red, and thrush appeared over the entire mucous lining of the mouth. Another consultation was deemed expedient; the three gentlemen whose opinion was requested viewed the case in a different light. One pronounced the patient to be suffering from softening of the stomach; the others, struck by the pinched countenance, the emaciation of the entire body, and the cough which had set in in the incipient stage of the disease, believed in galloping consumption, and proposed cod-liver oil. M. Herard, who had long been acquainted with the patient, found it impossible to adhere to any of these views, and, moreover, unable to venture, under the existing circumstances, on the exhibition of cod-liver oil, surmised that the previous protracted abstinence might possibly have some share in the aggravation of the symptoms, and determined upon trying the effects of nutriment. He found it almost impossible at first to carry out this plan, and it was with the utmost difficulty that a few drops of iced beef-tea were swallowed. He succeeded by dint of perseverance, however; and when the food remained on the stomach, and in proportion to its increase, the pulse fell from 145 to 130, 120, 115 and 100; the delirium yielded, and, in short, the patient recovered.

M. Herard is convinced that similar cases are not of unfrequent occurrence, and that the dangerous symptoms of the ataxic form of typhoid are often induced by the strict abstinence previously enforced. In a highly interesting paper on the subject, M. Marotte has established that vomiting, diarrhœa, and delirium, more especially the latter, are characteristic of starvation. In a lecture recently published, M. Trousseau already pointed out the striking analogy existing between the more serious symptoms of typhoid and those of autophagy consequent on protracted abstinence. The valuable experi-

ments of M. Chossat may further be adduced in illustration of the theory which accounts for this extremely important fact, and must lead to a complete change in the treatment of typhoid fever.

"The expression we advisedly use is treatment, not diet. Nutriment here must be viewed not as an adjuvant, but as the principal medical agent. It has been objected that if food be exhibited, indigestion and emesis must follow. This is correct after protracted abstinence, and proves the necessity of early alimentation, otherwise the digestive powers of the stomach become impaired and the food is rejected. Opponents of the method further urge the impossibility of venturing on the exhibition of nutriment, on account of the deposits which necessarily exist on the mucous surface of the stomach, and poison the breath of the patient by their decomposition. Now these deposits are frequently but one of the consequences of abstinence, and if the tongue and gums are cleansed with a brush impregnated with honey of roses or syrup of mulberries, the sores do not form again after the ingestion of food. M. Herard had recently under his care, at Lariboisiere, patients who have fasted for three weeks, and who displayed marked distaste for any kind of nutriment. The gums were covered with sores, the breath was foul; but after cleansing the mouth and scraping the tongue, food, which these patients were compelled to take, produced its usual salutary effects, and in a few days was accepted with pleasure and with the most beneficial results. M. Marotte relates the case of a young man, aged twenty, who, at first compelled to eat, soon took his food with pleasure, and ultimately recovered in an unhoped-for manner. The propriety of feeding patients suffering from typhoid has also been questioned in another respect; the presence of intestinal ulceration, of tympanitis and diarrhœa had been viewed as a direct counter-indication to the exhibition of nutriment, and as the probable cause of the most perilous symptoms in case this method was resorted to. This fear is entirely chimerical. You must not, moreover, forget that the cachectic condition of the patients is the greatest possible obstacle to the healing of the ulcers, and that the latter are portals through which poisonous principles will most readily be admitted. Subjects affected with intestinal ulcerations should be fed, and the ulcers, nevertheless, decrease in size, and heal in the same manner as bed-sores, so common under similar circumstances, yield to the influence of generous diet. Some short time ago, a woman was admitted into the Hotel-Dieu, on the twentieth day of a

typhoid fever complicated by extensive mortification in the region of the sacrum. Nutriment, appropriate in nature and in quantity, was gradually exhibited, and the wound speedily lost its pale aspect, assumed a more healthy hue, granulated, and healed. Had abstinence from food been here persevered in, she would very probably have perished; but a contrary course was followed, and she recovered rapidly. Another beneficial effect of nutriment is to shorten the duration of the convalescence, which formerly was interminable after putrid fever. Patients, who have received adequate support during the progress of typhoid, have been known to pass without any transition from disease to health, and walk in the garden of the hospital on the very first day they left their bed.

"It is not unimportant to inquire what should be the nature of the nutriment allowed. It was formerly the custom to exhibit food when only the feverishness had subsided, and it sometimes unfortunately happened that the delay was so long as to render the food superfluous. Other practitioners prescribe broth, under the impression that broth is sufficient support to the system. Broth is doubtless a nutrimental substance; we are all acquainted with its restorative powers, but we must not exaggerate its value. M. Bouchardat demonstrates that a quart of broth contains but six drachms of solid nutriment, two of which are saline ingredients; substract from the remaining four drachms a certain amount which passes through the kidneys, and you will doubtless agree with me that the residue affords but insufficient support to the system.

"M. Herard proceeds then to describe his mode of administering food in typhoid. Soups are, in his opinion, the best articles of diet; egg-flip is often useful, and contains a larger proportion of nutriment especially applicable in the thoracic variety of the disease. Jellies are also advantageous, and when, on account of their volume, soups are not easily digested, the professor, even at an early period of the fever, does not hesitate to recommend the suction of mutton-chop. Patients whose stomach rejects the weakest broth, frequently digest with facility a small piece of broiled beef or mutton. He is no friend of the debilitating *tisanes* and diet-drinks usually prescribed, but agrees with M. Monneret in the utility of wine, as a stimulant of the vital powers. The beverage he recommends is weak wine and water, and, in addition, eight ounces of Bordeau or bark wine, to be taken in enemas if necessary. When the digestive powers of the stomach have been much impaired, he conceives that pepsine, acting as a kind of ferment,

promotes the assimilation of the food and gives the gastric viscera time to recover their secretive action, the patient in the meanwhile, not suffering from the effect of injurious abstinence. Fifteen grains of pepsine may therefore be exhibited in a wafer with animal food.

"In addition to these physical restoratives, M. Herard has recourses to moral agency. The greater number of individuals suffering from typhoid fever in the hospitals are young people of both sexes, not only strangers in Paris, but often foreigners. Their isolated condition, combined with the knowledge that they are laboring under serious illness, has much to do with the low condition into which they speedily fall. Hence the importance of encouraging such patients by a kindness of manner and of language calculated to improve their moral condition, and to counteract the unfavorable influence exercised upon their system by the distressing circumstances under which they happen unfortunately to be placed." —*Journ. Pract. Med. and Surg.*, May, 1861.—*Am. Med. Jour.*

CHOLERA INFANTUM.

By W. OWEN BROWN, M. D., of Providence.

Read at the Quarterly Meeting of the Rhode Island Medical Society, Oct. 2, 1861

This disease occurs in New England in the hot weather of summer and early autumn, and is so familiar to most physicians, as to require no very minute definition. It is characterized by diarrhœa, vomiting, and great prostration of the system. The discharges from the bowels are variously colored, as green, dark brown, or resembling rice water. The odor is often very fetid, similar to that of putrescent meat, arising, perhaps, from the absence of the antiseptic influence of healthy bile, in due amount, in the intestinal canal. The fever which is usually present, occasionally assumes a remittent type. The bills of mortality in most cities, and the experience of physicians in the localities where it prevails, testify to its fearful fatality.

History.—It is doubted if there is another disease, which annually destroys so many lives, about which so little has been written. Authorities tell us that in our large cities, during

the summer months, about one-fourth of all the deaths, among children, arise from this disease. During the year 1860, five hundred and fourteen children are reported as having died from it in Philadelphia alone, which is perhaps not more than the average mortality from this cause, in most of the large cities in this country.

Though it causes this frightful destruction of infant life every year, yet the name of Cholera Infantum, or its synonyms, is not found in the indices to Braithwaite's Summary of Medicine and Surgery, during the six years from 1854 to 1860, thus leaving the inference that not an important article was written upon this subject during all that time. In the Year Book of Medicine and Surgery, of the Sydenham Society, for 1859, it is true that two articles upon the Pathological Appearances in Cholera Infantum are alluded to; both were published in that year. In one of these articles, the writer states that in many cases, the sinuses of the dura mater were found "filled with fresh blood coagula, and with fibrinous formations more or less adherent and firm," and hence arrives at the conclusion that the rapid loss of water from the blood, favors the formation of venous thrombus in the brain, and thus occasions sudden death, in many cases. In the other paper alluded to, the author relates four cases, in all of which he found inflammation of the colon, which he considers a constant attendant upon the disease. Besides these articles, the Year Book alludes to a paper upon Cholera Infantum, in the United States, as published in New York in 1858, and also to a paper published in the Gazette des Hopitaux, in 1858, entitled Weaning, —its Relations to Cholera Infantum. Pethaps the most valuable article yet written upon Cholera Infantum, is by Dr. Jas. Stewart, published in New York, in 1857. This paper, however, is not intended to present a biblography of this subject. In the various medical periodicals, there are remarks upon the "Diarrhœa of Infants," which, from the kindred nature of the diseases, affords much valuable information relating to the subject immediately before us.

Dr. Condie states that "the disease occurs as an epidemic in all the large cities, throughout the middle, the southern, and most of the western States, during the season of the greatest heats, making its appearance and ceasing, earlier or later, according as the summer varies in the period of its commencement and close." "In the more southern States, it appears as early as April or May, and frequently cases of it occur until late in September."

Dr. Copland remarks, "that in some very unhealthy climates within the tropics, the children born of European parents seldom reach two or three years, without having an attack, and in some places scarcely one will survive this age, if suffered to remain in them. It is certainly not an infrequent malady among children in the English metropolis."

Symptoms.—The disease, like Cholera, is often preceded by diarrhœa, but not unfrequently it commences at once, like cholera morbus, with vomiting and purging, and death sometimes occurs within twenty-four hours. More commonly it comes on with frequent diarrhœa, attended by occasional vomiting, with marked pyrexia, and the case may be protracted from one to several weeks, ending in complete irritability of the stomach, collapse, and, perhaps, cerebral effusions.

The diarrhœa may linger for months, even, and with the approach of cold weather, yield to treatment, or the recuperative powers of the system may then, alone, prove adequate to recovery.

Pathology.—This has often been minutely and ably described, and it is not the intention of the writer to go into detail, nor could he state anything original upon this head.

In cases of an early death from an attack, it is known that the mucus membrane of the alimentary canal is unusually pale, the liver frequently congested,—sometimes enlarged, and observers are perhaps unanimous in the statement that the *mucous follicles* of the alimentary canal are enlarged. Dr. Horner describes the appearance of the enlarged follicles as "resembling a sprinkling of white sand upon the surface of the mucous membrane."

In more protracted cases, the mucous membrane of the stomach and intestines exhibits evidence of inflammation in red points, and the glandular follicles are enlarged. Dr. Horner "found the mucous follicles enlarged, and even ulcerated, both in the small and large intestines, and in one case, ulcerations of the surface of the membrane in the jejunum.

Pathologists appear to be united in the opinion that there is present, *at first*, merely an *enlarged* condition of the *mucous follicles*, with irritation of the mucous membrane, and congestion and enlargement of the liver. At a more advanced stage, inflammation of the gastro-enteric mucous membrane, with, sometimes, ulceration and softening.

At almost any period of the attack, the meninges of the brain are liable to be involved, and serous, or sero-sanguineous, effusion to take place.

Causes.—The disease is known to be almost wholly confined to children under two years of age. The *mucous follicles* of such are "liable to be *largely developed*," and the mucous membrane is peculiarly sensitive. During dentition, the buccal mucous membrane, as well as the salivary glands, perform their functions of secretion and excretion with unusual activity; by reflex action, the nervous irritability produced by the pressure of the advancing teeth against the gums, or against the nervous filliments distributed to the gums, would excite the mucous membrane of the stomach and intestines to morbid action; any indigestible substances taken as food, may increase this action, and the relaxing and debilitating effect of the hot, close, damp air of cholera infantum localities, together with the unascertained atmospheric poison absorbed into the system from such localities, complete the conditions essential to the production of this fatal disease.

It is well known that during the heat of summer, certain sudden changes, as from dry and warm to damp, sultry, "close" weather, will give origin to numerous cases of cholera morbus in adults; it is believed, that in large cities, corresponding atmospheric changes are attended by a large increase of cases of cholera infantum among children,—that causes which would, in adults, have produced cholera morbus, in the more sensitive and impressible digestive organs of the child, induce cholera infantum.

Nature.—The pathological conditions throw much light upon the nature of this affection, rendering it very safe to regard it as essentially, at first, a *gastro enteric irritation*, passing into gastro-enteritis, with the concomitant lesions, involving especially the mucous follicles of the alimentary canal, complicated with congestion and enlargement of the liver; and made much more virulent by a depraved condition of the blood, induced by atmospheric toxæmia.

Treatment.—At the onset of an attack, the indications, reasoning from the pathology and nature of the disease, are:

1st. To quiet nervous irritability, whether arising from dentition, or other cause affecting any part of the digestive organs, and which, by reflex action, may induce vomiting or diarrhœa.

2d. To arrest the increased secretion and excretion of the mucous follicles, and thereby arrest another source of diarrhœa and vomiting.

3d. To control the fever induced by the blood poison, and give the system an opportunity to recover itself.

4th. At a more advanced stage to guard against collapse, or to arouse the system from it when it has supervened.

5th. The treatment of the sequelæ.

To meet these indications, the following remedies, variously combined, have been found very efficient:

Opium, or its preparations; cresote, calomel, and mercury with chalk; aromatics, as aromatic syrup of rhubard, infusion of cinnamon, or of spearmint; astringents, as rhatany, in some of its preparations, and acetate of lead; to these may be added quinia, iron, mineral acids and ice.

To a child under two years, one twenty-fourth to one sixteenth of a grain of powdered opium, may be given, with half a grain to a grain of calomel, to promote the action of the liver; or, where there is not much gastric irritation, one to two grains of Dover's Powder, with a grain of mercurialized chalk, may fulfill the first indication to quiet nervous irritation.

The addition of a grain of acetate of lead, to either of the above, restrains the action of the secretory surface of the intestines, or constringes the mucous follicles, and at the same time, perhaps, allays febrile excitement.

Creosote is known to have a powerful effect in restraining serous discharges, and it seems highly probable that its antiseptic properties may be of advantage, since the discharges are so often highly putrescent; besides, it is often useful in allaying gastric irritation.

Aromatics, acting as local stimulants of the digestive organs, often prevent or overcome the want of tone which gives origin to morbid excretion.

Any successful attempt at arresting the diarrhœa and vomiting, is liable to result in an increase of fever, with great thirst; the profuse discharges from the stomach and bowels deprives the blood of its watery part, and in this manner, thirst is also induced.

Ice, given in small quantities, at frequent intervals, most happily controls the fever, and allays the thirst.

Since the preparation of this paper was commenced, the writer has had under treatment a child of some twenty months, sick with cholera infantum, which lay, part of the time, in a semi-unconscious condition, but was disturbed at intervals by pain, or aroused by thirst, and then so eager for fluids as to take nearly indifferently, unpalatable medicines or grateful drinks. When a lump of ice was placed in this child's mouth, with the first cooling sensation, it awoke from

its lethargy, and its face fairly beamed with pleasure. From that moment it began to amend, and recovered from a nearly hopeless condition.

Dr. Mauran, of this city, relates an instance which occurred to him many years ago, when ice was not so much used in practice as now. He was called to a child nearly in the collapsed stage of cholera infantum. It was vomiting most profusely a dark substance resembling coffee grounds. It entreated water from every one who approached, and vomited it instantly. Dr. M. called for some ice, and a lump was placed in the child's mouth, and retained with great satisfaction. Regarding the case as hopeless, and seeing the comfort the ice afforded, the Doctor sat by and gave it piece after piece, until, in a very brief time, the child had swallowed an entire saucer full. The ice was continued during the night as the child desired it. This patient rapidly recovered.

The fourth condition, or tendency to collapse, or collapse itself, is, of course, best met with hot applications, cordials and stimulants, if the stomach will bear them; but too often little remains which can be done with much hope of recovery.

In the Transactions of the Medical Society of the State of New York, for 1861, is an article upon "Dermoid Medication," which, it is said, "has often proved successful, in cases of cholera infantum, when all other means had failed." The skin is first cleansed with soap and warm water, and excited by frictions. Then a flannel, sufficiently large to cover the abdomen, is saturated with a solution of one scruple of corrosive sublimate, in six fluid ounces of alcohol. The flannel is sprinkled with laudanum and laid upon the bowels; over this is placed another layer, saturated with a hot infusion of spices. The whole is covered with oiled silk, and suffered to remain from twenty-four to forty-eight hours. Ice, iced champaigne, &c., to be given internally.

The *sequelæ* are most likely to be chronic diarrhœa, with anæmia, or marasmus. For the treatment of these affections, quinia, or quinia and iron, seem most admirably adapted, as the following:

℞. Quiniæ et Ferri Citratis..... ʒ ij.
Syrupi Zingiberis.....f. ʒ iv.
Tincturæ Opii.....f. ʒ ss.

Misce.—Dose, half a teaspoonful once in four hours, to a child under two years old.

It is familiar to the profession, that after opiates have failed

to restrain a diarrhœa, quinia, or quinia and iron, will most effectually accomplish this end. In an able article in the *American Journal of Medical Sciences*, No. LXXXIII, N. S., p 53, the writer says of "the more obvious and important effects of quinia, none is of so much importance as its power of giving contractile action to the capillaries. This property of quinia gives it a power over almost all forms of venous and capillary congestion, which, perhaps, it is impossible to obtain by any other known agent." In concluding his remarks upon the known antagonistic effects of opium and quinia, he says, "he is forced to the conclusion, that they are not so far antagonistic that they should never be administered together."—*Ibid. p.* 58.

Since the above was written, the writer has met with the following extracts, from the Transactions of the Illinois State Medical Society, for 1860:

Speaking of the Diarrhæa of Children, Dr. J. O. Harris says:—"In this disease I find that after exhausting all the usual remedies advised by our standard authors, and by my brother physicians, that quinine, in *full* doses, frequently repeated, acted (or seemed to act) admirably. I thought at the time that I was prescribing empirically, and now do not pretend to explain the modus operandi of the remedy. I only know this, that my patient recovered under the use of quinine, and I still prescribe it, when I see no particular indication for its use."

Dr. J. S. Rich, of Florida, in an article upon Cholera Infantum, says he was remarkably successful in treating it with large doses of quinine. The following was given to his own child:

℞. Quiniæ Sulphatis.....grs. v.
Hydrargyri Chloridi Mitis.....grs. iij.
Olei Terebinthinæ.....gtt. xx.
Mellis.....f. ʒ j.

Misce.—Give the whole at a dose.

After about twelve hours, the same dose was repeated, omitting the calomel. He says, "I could not detect any other effect of the quinine than a most profound and salutary sleep; the pulse, which had been much too frequent, irregular, thread-like and fluctuating, became slow as in health, and firm; the skin was continually moist, with warm perspiration; the kidneys acted most copiously; the bowels acted twice, but the last showing that the liver was performing its healthy functions. The most remarkable change was the disappearance of

the general cadaverous aspect and *grave-yard odor*. The return of appetite, and general powers of digestion, was extraordinary."—*Philadelphia Medical and Surgical Journal, May* 24, 1862.

The following is a summary of treatment which the writer has found happily to fulfill many of the conditions suggested in this paper.

In the early stages, the following mixture is given, unless there are manifest contra-indications, including all the ingredients, or omitting those not apwarently required:

℞. Syrupi Acaciæ.....f. ʒ iss.
Syrupi Rhei Aromatici.....f. ʒ ss.
Syrupi Krameriæ..... ʒ ss.
Spiritus Ammoniæ Aromatici.....f. ʒ j.
Tincturæ Oppi.....f. ʒ ss.
Creasoti:.....gtt. iv–vi.

Misce.—To a child of one year or under, give half a teaspoonful once in four hours, gradually increasing the dose to a teaspoonful.

If this does not check the discharges, give at alternate doses, one twenty-fourth to one sixteenth of a grain of powdered opium, with half a grain of calomel, or omitting the first preparation, give the last once in four hours. If still more restraining effect is desired, add to the last half a grain of acetate of lead.

At any stage of the disease, if there is evidence of acidity in the primæ viæ, one or two grains of the bicarbonate of soda are added to the above powder, of course omitting the acetate of lead, when bicarbonates are given. Ice, as has been before suggested, or infusion of spearmint, cold, when there is not much gastric irritability. If there is much tenderness of the abdomen, mustard cataplasms, carefully guarding against vesication, or cloths wet with mustard and vinegar, pepper sauce, or alcohol, are applied to the abdomen. When there are are head symptoms, mustard cataplasms to the feet.

Dr. Condie states that minute doses of calomel rubbed up with sugar, and placed upon the tongue, will usually allay the vomiting.

Of course this treatment is not in any manner intended to suspend the paramount advantages to be derived from pure air, or a change of air, when practicable.

INDIVIDUAL REMEDIES IN EPILEPSY.

Dr. Anstie read a paper before the Medical Society of London (March 24, 1862,) in which he gave the results of his own experience in the use of certain remedies in epilepsy. These were of two kinds—tonics and sedatives: of the former he had made careful experiments with cod liver oil, quinine, and phosphorus, and also to a certain extent with iron; but of the effects of this last remedy he had not kept a tabulated record. Cod-liver oil was employed *alone* in twelve cases among the out-patients of Westminster Hospital and Chelsea Dispensary: the disease was in every instance of the simple or "idiopathic" kind; and the following results were obtained: Three complete failures (patients aged 14, 26, and 32, respectively; in all of them the disease was of long standing); one case in which the patient, a man, aged 44, derived no relief as far as regarded the fits, but his mental condition was improved; two cases (aged 10 and 12) which were improved, the fits being lessened in frequency, but the patients disappeared from the author's supervision while still by no means cured; and, finally, six cases, all still under observation, in which the fits have ceased entirely, and, so far as can be seen, the disease has been cured. Out of these six cases, two were sufficiently grave to put the efficacy of the remedy to a severe test; one of them was that of a girl, aged 17, epileptic from infancy, and in whom the fits had for some time past been happening two or three times every day; the effect upon the facial aspect and upon the intelligence of the patient had been very serious. Cod liver oil was employed persistently for three months with the effect of inducing an entire cessation of the fits, and a most marked improvement in the intellectual and sensorial functions. The other case was that of a boy, aged 13, in whom the disease, which was hereditary, had come on six months previously. The fits were not very frequent, but were very severe; the memory was a good deal affected, and the shape of the head and the aspect of the face were far from encouraging. Nevertheless, a complete cessation of the fits soon followed the use of cod-liver oil. The remedy was persisted in for six months on account of occasional threatening symptoms; but even these have quite disappeared. The mental condition is much improved, and the boy may be pronounced

cured, as far as we dare use that term at all. Quinine had been used singly in six cases: two of them had entirely resisted its influence (both these patients were women), a third had been very much benefited, the fits being much reduced in frequency, and an unpleasant numbness in the leg having disappeared. In the other three the improvement apparently amounted to cure. One of these cases, in which a very marked and peculiar aura was present, was minutely analyzed, and the influence of quinine in stopping the aura, and altogether averting the paroxysms, was plainly shown. Doubtless local measures might have done much in this case, but they were intentionally and successfully dispensed with. All the cases treated by the author with quinine had been distinguished by the presence of some persistent local pain or numbness. Phosphorus had been tried by the author in only two cases of epilepsy, at the suggestion of his friend and colleague, Dr. Radcliffe, who has recommended its use in his book, as also that of cod-liver oil. The cases were inveterate ones, in which cod-liver oil had failed to produce any effect. The phosphorus was given in doses of five to ten drops of the phosphoretted oil of the Prussian Pharmacopœia, three times a day. The fits were not lessened in frequency, but the general condition of the patients was much improved, and the miserable sense of nervous depression greatly relieved. Phosphorus ought to be extensively tried in epilepsy and in other nervous affections. With regard to iron, the author not having kept tabulated reports of its effects, was only able to confirm, in a general way, the popular belief in its great utility. He was in the habit of limiting its employment to cases distinguished by anæmia; and he related one or two instances of its usefulness when given in such cases. The author remarked that all these four tonics, cod-liver oil, steel, quinine, and phosphorus, were distinguished by the fact that they acted as *foods*, either to the nervous system, or the blood that nourishes that system. Looking at the success obtained by himself, and by other observers of larger experience, and also to the fact that the whole group of chronic convulsive diseases, of which epilepsy may be said to form the centre, are curable, if at all so, in nine cases out of ten by a nutrient-tonic regimen—the author urged that there was the greatest reason for extended experiments with remedies of this class, experiments which should be patiently persisted in for months together, no other medicines being used, except aperients when necessary. The sedatives of which the author had made particular trial were opium, hyoscyamus,

belladonna, and sulphate of aniline. With regard to belladonna, he must state that he had not thought it right to push it to the extent of producing wide dilatation of the pupil for a long time together. He had administered it in doses of one-sixth grain of the extract twice or three times a day, a quantity which is usually sufficient to produce the minor effects of the drug, namely, relief of neuralgic pain, and resolution of muscular spasms; and in these doses the results were very equivocal, and by no means encouraging. With regard to the other three sedatives, the author regarded it as proved by his own experience, that in a considerable number of instances they possess the power of delaying the fit, or mitigating its severity; and for this purpose he was at present inclined to give the preference to the sulphate of aniline. This remedy he had tried repeatedly upon six epileptic patients, and also in many other cases of chronic convulsive disease. It was a most serious mistake to administer sulphate of aniline, or indeed any other sedative, in large doses, with a view to arrest or diminish convulsive muscular action. In the only two cases of epilepsy in which the author had pushed it to the extent of large doses, on account of the failure of small quantities, a serious aggravation of the fits occurred. In doses of one grain three times a day, with an additional grain to be taken immediately on the occurrence of any *prodromata* of a fit, sulphate of aniline seemed to materially benefit four patients to the extent of delaying or mitigating the paroxysm, and in three separate instances the fit seemed to have been altogether averted for a considerable time.

In conclusion, the author desired to state his conviction that future experiments with sedatives should be limited to the use of small doses only, and that they should be employed chiefly in the slighter cases of epilepsy which are not of long standing, or in those in which tonics and nutrition had already done much, but had not quite effected a cure. In short, wherever we could reasonably hope to effect good by the mere fact of breaking through the vicious habit, so to speak, of convulsion; then we might well try experiments with sedatives, and the results obtained by each observer should be numerically noted, and published.—*Med. Times and Gaz.*

ON OVARIOTOMY;

THE MODE OF ITS PERFORMANCE, AND THE RESULTS OBTAINED AT THE LONDON SURGICAL HOME.

By I. B. BROWN, Esq., F. R. C. S.,
Senior Surgeon to the London Surgical Home.

After some preliminary observations upon the operation of ovariotomy, its now recognized character, and the mortality from it being much less than that from many other capital operations, the author alluded to the statistics of Mr. Clay, of Birmingham. He believed that, highly favorable as were the results given, there was good reason for supposing that they would become still more so when the statistics were hereafter collected, subsequently to the period to which Mr. Clay's cases extended—namely, February, 1860. The conditions rendering the operation justifiable were next dwelt upon. The difficulty of diagnosis was shown, especially in cases complicated with cancer. Much would, however, depend upon the history of the patient and her family, in arriving at a correct conclusion. Adhesions at the present time rarely prove an obstacle to the completion of the operation; they are either broken through with the hand, or divided with the hand or ecraseur. When necessary to secure any by ligature, he advised the use of silver wires instead of thread or twine, allowing them to remain within the abdomen after cutting them short and close.

The author next fully described his mode of performing ovariotomy. He advises the pedicle to be enclosed in a clamp —the ordinary carpenter's calipers—as near to the tumour as possible, and kept externally. Its advantages are, that it can be removed in from one to three days; the wound heals quickly, and convalescence ensues in two or three weeks. If the pedicle proves to be very short, and pain is complained of, the clamp is to be removed in a few hours.

The preliminary measures to be adopted previous to the operation were then described, and their importance shown as bearing on the subsequent results. Amongst others, the author advised the observation of certain atmospheric conditions, and the avoidance of any proceeding when the atmosphere was low and heavy, with an absence or deficiency of

ozone, and in that condition generally which we describe as depressing. If greater attention were paid to atmospheric changes, the author thought there would be much less of gangrene, pyæmia, low fever, &c., so frequently witnessed after operations.

The after-treatment was also dwelt upon, and, finally, the analysis of the cases. Of the latter, ovariotomy has been performed nineteen times by the author in the London Surgical Home up to the present time. Of these, thirteen have been recoveries, and six deaths. The details and special particulars of the whole of these cases were given in a series of tables. The ages varied from eighteen to fifty-six. Of the successful cases, eight were under the age of thirty, and five above; whilst of the unsuccessful, one was twenty-one, and five were thirty and upwards. The duration of the disease in the successful cases was from four months to six years; six were within the first year, or ten within two years, and three over the latter period. Nine were single, and four were married, and of the latter, two only had had children. Five had undergone tapping from one to three times. In the unsuccessful cases the duration of the disease was from two to ten years; four were married, three of whom had families of from three to six children. Four of the fatal cases were tapped from one to six times. The general health was very good in five of the successful cases; in six it was but middling; in one it was shattered, and in another bad. In the unsuccessful cases four had bad health; one was in good health, and another had good health up to six weeks before the operation.

With respect to the operation, the incisions varied from three to seven inches long; in eleven it did not exceed five inches. The tumors were multilocular in eleven, and unilocular in two of the successful cases; in the unsuccessful they were multilocular in four, unilocular in one, and more or less solid in the sixth, containing hair, teeth, bones, &c., and no doubt congenital. Adhesions were found in all except four of the successful and one of the unsuccessful cases. These varied very much, being either very slight and easily broken down, or firm, strong, and unyielding; some were numerous in all directions, requiring to be cut or ligatured. Chloroform was given in all the cases; in two it had to be discontinued, but the patient suffered no pain; in two instances ether was substituted during the latter part of the operation. The pedicle was retained outside of the abdomen in all but two of the cases, the calipers being used for the purpose of holding

it. In all the operations performed lately, the wound had been closed by silver-wire sutures, simply twisted. Of the causes of death in the six fatal cases, in two instances it clearly arose directly from the operation itself; in the other four, conditions were found which chiefly brought about this result; in one case—that of the solid tumor—there was much old disease found; in another, the patient had been a hard drinker, was tapped five times, the belly being filled with 45 pints of ascitic fluid, independently of the contents of the ovarian cyst, there was softening of the liver, and death occurred in six days. In the other two cases, diarrhœa carried off both—one in eight days, and the other in eighteen after the operation. In one of these, cancer of the duodenum was found, wholly unsuspected during life. The author concluded by stating that all these operations had been witnessed by gentlemen from various parts of the world, of Great Britain, and the metropolis, many of whom had watched the results from day to day and week to week.—*London Lancet.*

CONSERVATIVE MEDICINE.

By AUSTIN FLINT, M. D.,

Prof. of the Principles and Practice of Medicine in the Bellevue Hospital Medical College, N. Y., and in the Long Island Hospital.

"What does the writer mean by *Conseruative Medicine?*" This will be the mental inquiry of the reader when the caption of this article meets his eye. It is desirable, first of all, for the writer to explain the subject which he ventures to hope will appear to possess interest enough to lead to a perusal of the pages which are to follow.

The meaning of *Conservative Surgery* is well understood. This phrase has been sufficiently common of late years. The conservative surgeon aims to preserve the integrity of the body. He spares diseased or wounded members whenever there are good grounds for believing that by skillful management they may be saved. He resorts to mutilations only when they are clearly necessary. He weighs carefully the dangers of operations, so as not to incur too much risk of shortening life by resorting to the scalpel. By conservative

medicine, I mean an analogous line of conduct in the management of maladies which are not surgical. The conservative physician shrinks from employing potential remedies whenever there are good grounds for believing that diseases will pursue a favorable course without active interference. He resorts to the therapeutical measures which must be hurtful if not useful, only when they are clearly indicated. He appreciates injurious medication, and hence does not run a risk of shortening life by adding dangers of treatment to those of disease. Such, in brief, is an explanation of the subject of this article. For the phrase *conservative medicine* I am indebted to a distinguished friend and colleague, well known as eminently a conservative surgeon.*

During the last quarter of a century a change has taken place in medical sentiment as regards surgical operations. New and grand achievements in surgery seemed formerly to be the leading objects of personal ambition. To borrow a fashionable expression, they were decidedly the rage. Boldness in the use of the knife was the trait in the character of the surgeon which was most highly admired. The history of surgery during the first third of the present century is characterized by the introduction and frequent performance of numerous formidable operations. It was customary to speak of them as brilliant, and the daring surgeon enjoyed somewhat of the *eclat* which belongs to the hero of the battle-field. This analogy was implied when one of the greatest of our American surgeons, wishing to distinguish his most brilliant exploit, styled it his Waterloo operation. The change that has taken place is marked. We hear now comparatively little of terrible operations, and of that sort of heroism which is associated with bloody deeds. What would once have been considered as a degree of courage to be admired, is now stigmatized as rashness. It is an equivocal compliment to say of a practitioner that he is a bold surgeon. The change, it may be said, is in a measure due to the fact that the great number of new operations which have been introduced since the beginning of the present century leaves but a limited range for further explorations in that direction; but this explanation will go only a little way. The change is one of sentiment. The desire is to preserve the integrity of the body, to avoid mutilations, to incur the dangers of capital operations only when they are imperatively called for—in a word, conservatism

Prof. Hamilton.*

has become the ruling principle in surgery. The most important of the most recent improvements in surgery exemplify the influence of this principle on the medical mind.

An analogous change, within the same period, has taken place in medical practice. Formerly, boldness was a distinction coveted by the medical, as well as by the surgical practitioner. "Heroic practice" was a favorite expression, consisting in the employment of powerful remedies, or in pushing them to an enormous extent. The physician emulated the surgeon in daring. The change is not less marked in medicine than in surgery. We hear now oftener of diseases managed with little or no medication, than of cases illustrating the abuse of remedies. In the treatment of many affections it is considered necessary to employ measures which, but a few years ago, it would have been considered culpable to withhold. The change, too, is here one of sentiment. We desire to preserve the vital forces, to avoid the perturbations and damaging effects of potential therapeutic agencies—in short, conservatism has become a leading principle in medicine as well as in surgery. The improved method of managing a host of affections will be found to illustrate this fact.

Before proceeding further, let us inquire how the contrast between medical practice at the present moment and a quarter of a century ago, should affect our estimation of medicine. Is medicine disparaged by the changes which have actually taken place? It is not enough to answer this question in the negative. Mutations, when they denote progress, are, of course, desirable. In so far as the contrast shows improvement, medicine at the present moment is deserving of esteem, the more, as the changes are great. It redounds to the glory of medicine that it admits of illimitable progressive changes. In this fact lies the distinctive feature of legitimate medicine as contrasted with illegitimate systems of practice. But, some one may say, is there to be no stability in medicine, no traditional authority, and is reverence for the past to have no influence? If not, where is our ground of confidence in the practice of the present day? And is it not probable that at the end of another quarter of a century mutations will have occurred twice as great as those which have taken place during the last twenty-five years? These questions are to be met fairly and squarely; let us endeavor so to meet them.

Waiving the consideration of what constitutes perfectibility in the *ars medendi*, and whether it be obtainable or not, no one will assert that medicine is now, or ever has been, in a

condition not to admit of indefinite improvement. Improvement in its practical applications and results is the great end of the labors devoted, now and hitherto, to the different departments of medical knowledge, viz: anatomy, physiology, animal chemistry, materia medica, pathology, and clinical medicine. We may assume that these labors, thus far, have not been profitless, and, accordingly, that practical medicine has improved. We may assume, also, that there is abundant encouragement to continue these labors, and, hence, that further improvement is to be expected—to what extent it is vain to speculate. It necessarily follows that stability in medicine is not to be counted upon; that the doctrines of to-day have no intrinsic claim to perpetuity; that because they are now in vogue is not a sufficient reason why they should not hereafter be modified or rejected, and that there is, to say the least, no ground to deny the possibility of the changes which are to take place hereafter being a whit less than those which have already taken place. What then? There are skeptics and scoffers with regard to medicine, and there are many persons who live and thrive by promoting popular distrust of it. It may seem to be giving aid and comfort to the enemies of medicine to concede that its past history abounds in errors, that present errors doubtless abound, leaving ample scope for future improvement. Be it so. We have nothing to do with skeptics, scoffers, and charlatans. We are not called upon to repel attacks prompted by ignorance, selfishness, and deceit. Yet it is desirable, with regard not only to the interests of the medical profession, but to the welfare of humanity, that medicine should hold its proper place in popular estimation. What, then, is the attitude to be taken as regards the just claims of medicine to public consideration and confidence? A body of men in every generation, from the time of Hippocrates to the present day, in all civilized conntries, have conscientiously and industriously labored to acquire knowledge of diseases with reference to the relief of suffering and the prolongation of life. Under a host of difficulties and obstructions, many inherent in the pursuits themselves, and others proceeding from various intrinsic sources, the labors of physicians and their collaborators have continued and still continue. Now, granting that they have advanced slowly and often been led astray, where else can society ever seek for aid in the necessities of illness with a better prospect of success? Granting that they have failed, and still fail, in conferring all the benefit that it is to be desired, and that, with the purest

intentions, their efforts have been sometimes not only without avail, but hurtful, should the preponderating good be therefore overlooked, and is there any rational alternative but to accept good and submit to the limitations and errors incident to existing knowledge? All that society can claim of medicine in any generation is, the capabilities of the medical science in that generation. All that society can claim of physicians is, that these capabilities shall be understood and judiciously applied. But we are opening up trains of thought which will lead us a long way from our subject, and we must abruptly return to the consideration of conservative medicine.

It is an interesting point of inquiry, whence came the influences leading to conservatism as a principle of medical practice? The answer to this inquiry would not be the same in all countries and sections. It must be admitted that in our country the earliest and fullest development of the principle was in New England. Our New England brethren are fond of dating a new order of medical ideas from the publication of an address, more than twenty years ago, by Jacob Bigelow, on the self-limited character of certain diseases. Not underrating the importance of that publication, the spirit of the oral teachings of James Jackson and John Ware has exerted on the medical mind of New England an influence which can only be appreciated by those who have experienced it. To those who have known experimently the value of their teachings, it is a source of deep regret that the influence of these admirable professors has not been more widely diffused by means of larger contributions to medical literature. British conservatists attribute much to the writings of Dr. Forbes. Among the non-medical observers of the change in practice which has taken place, some have been pursuaded that it is due to the disciples of Hahnemann, an idea too preposterous to need refutation. The truth is, we are not to look for the causes of the change exclusively in the views emanating from particular persons. It is rather a legitimate result of scientific researches in different directions. If we were to specify circumstances which have more especially been instrumental in leading to the principle of conservatism, we would mention, *first*, the abandonment of the attempt to found a system or theory of medicine after the decline and fall of Brunonianism and Broussaisism; and *second*, the study of diseases after the numerical method with reference to their natural history and laws.

Strange as it appears, the importance of determining by

clinical observation the intrinsic tendencies of different diseases as the basis of therapeutics, seems to have been heretofore overlooked. Physicians have acted on the presumption that most diseases do not pursue a favorable course without treatment more or less efficient. This has been, to a still greater extent, the popular belief. The apparent proof of the success of the Hahnemannic treatment rests on this belief. What are the facts already ascertained with respect to the intrinsic tendencies of different diseases? We know that diseases in the management of which, but a few years ago, the physician would not dare to omit potent therapeutical measures, almost invariably end in recovery without any active treatment. Take, as examples, pneumonia limited to a single lobe, and acute pleurisy. It is sufficiently settled that these diseases involve very little danger in themselves, proving fatal only in consequence of complications. The practitioner, therefore, no longer feels obliged to employ blood-letting, mercurialization, cathartics, blisters, etc., in these diseases, with reference to the saving of life. The only question is, do patients pass through these diseases as well without as with such measures of treatment? Clinical observation, following up this inquiry, arrives at results which exemplify conservative medicine.

Our acquaintance with the natural history of the great majority of diseases is, as yet, very incomplete. Knowledge of the tendencies of diseases allowed to pursue their course without active treatment, is not readily acquired. We cannot conscientiously withhold remedies which we have reason to believe may prove useful. Cases are therefore to be slowly accumulated in which, from circumstances not under our control, diseases have been uninfluenced by therapeutic interference. This knowledge, it is evident, is the true point of departure for the study of the effects of remedies as regards the termination and duration of diseases. The information already obtained has rendered the use of powerful therapeutic agencies far less common than they were but a few years since. It remains to be seen hereafter what will be the further effect on medical practice of continued researches in this direction.

Conservative medicine assumes the remedial measures, according to their potency, must either do harm or good; that they can never be neither hurtful nor useful. Prior to the advent of conservatism, this important fact was not duly appreciated. Blows were leveled at diseases, but the patient was not enough considered. It did not enter sufficiently into

the calculations of practitioners, that if successive blows dealt at a disease were misdirected, the effect was not lost, but injury was inflicted in proportion to their force. Hence, it must needs follow that the sick man sometimes encountered, in addition to his malady, assaults not less real because well meant. In this respect, certainly, we have evidence of progress. We are satisfied that we do not err in saying that the most judicious practitioners of the present day accept the following maxims of that eminently conservative physician, Chomel: *first*, that we are not so much to treat diseases, as patients affected with disease; and *second*, that not to do harm, is no less an object of treatment than to do good.

In defining conservative medicine, we have seen that it expresses a characteristic of the improvements in medical practice during the last twenty-five years. Let us now direct our attention to illustrations afforded by some of the different classes of remedial measures. And, first of all, blood-letting suggests itself. How great the change as regards this remedy! Twenty-five years ago it was employed as if it were an innocuous remedy. Practitioners thought much more of the risk of not resorting to it when it was needed, than of the evil of its being needlessly resorted to. Hence, they often acted on the rule inculcated by a medical writer, viz., when in doubt, use the lancet. How different the rule of treatment now! Few practitioners of the present day would resort to this remedy in any case in which its appropriateness seemed to them questionable. Why not? Because it has been ascertained to be a spoliative remedy. It causes a disproportionate loss of the corpuscular elements of the blood, which are slowly regenerated. These corpuscular elements are already deficient in many diseases. In short, anæmia and its pathological relations were very imperfectly understood a quarter of a century ago. It is clear now to every one that, if not indicated, blood-letting should never be employed. This simple statement explains, in a great measure, the comparative disuse of blood-letting. The great question now is, whether it is a remedy called for more or less frequently in the management of certain diseases, chiefly the acute inflammations. I do not propose to enter here into a discussion of this question. This much may be said: Clinical observation, which is alone competent to settle the question, has shown that it is a remedy not called for so often or to so great an extent in acute inflammations as was supposed but a few years ago. A single incidental remark with respect to blood-letting, and it is one which

will to other remedies: In determining its influence for good or evil by means of clinical observation, it is not enough to take into account the ratio of recoveries, and the duration of cases of disease. Blood-letting may not increase the mortality from a disease, nor protract its continuance, and, yet, prove injurious. The injury may be manifest only in the slowness of convalescence and the impaired condition of the system after recovery.

Cathartics were prescribed a quarter of a century ago much more generally and to a much greater extent than at the present time. In fact, purgation was considered as rarely out of place, whatever might be the nature or seat of the disease. This harmonized with the notion that very many diseases originated in, and nearly all were liable to be perpetuated by, causes acting within the alimentary canal. Abernethy's views of the constitutional origin of local diseases were generally received and acted upon, and with him the constitution and the bowels were almost convertible terms; constitutional treatment consisting in the nightly blue pill and the morning black draught. The great Sir Astley Cooper quoted with approbation the quaint saying of an old Scotch doctor, who declared that fear of God and keeping the bowels open were the chief requisites of duty for safety in this world and the world to come! The importance of purgation became deeply rooted in popular sentiment. Cathartic pills or potions were considered indispensable in every household, and it would hardly express the frequency with which they were used, to say that family devotions were far less common. These were the days when, as Stokes remarks, more truly than chastely, doctors seemed to have always in their minds "a cathartic and a pot-full of fæces." In this day, when a change has taken place as respects the employment of purgatives, physicians suffer from the fact that it takes a long time to eradicate a firmly-fixed popular notion. Not only do we find it often embarrassing to reconcile patients to a different practice, but we are expected to inquire into, and carefully examine daily, by sight and smell, the excretions of patients, when we might otherwise consult our comfort (to say nothing of dignity) by dispensing with this exercise of the senses. The objects for cathartics, as now considered, are comparatively few, consisting chiefly in the removal of constipation, and their hydragogue operation in dropsy. They are no longer given as a matter of course, without definite indications. As perturbatory and debilitating agents, they cannot but do harm if not required, and their

frequent repetition conflicts with nutrition, and thereby with sustaining measures of treatment. The change, as respects this class of remedies, thus illustrates the principle of conservatism.

It is needless to remind the reader familiar with the practice current twenty-five years ago, of the frequency with which emetics were employed. Of morbid causes referred to the alimentary canal, a large share were supposed to exist in the *primæ viæ*—an expression then often used by writers and in common parlance. The same notion taken up by the public was conveyed by the homely expression "foulness of the stomach." Emetics were prescribed by physicians to remove saburral matters, and vomiting desired by patients as a cleansing operation. Severe and prolonged vomiting by lobelia, in conjunction with the vapor bath, constituted the Thomsonian practice, which in certain parts of our country, for several years, was considerably patronized. At the present time, emesis, irrespective of cases of poisoning and over-repletion, is rarely produced, excepting as incidental to the rule of remedies not prescribed for that purpose, such as the nauseant sedatives, colchicum, veratrum viride, etc. What would be thought of a practitioner now who treated cases of phthisis with emetics repeated almost daily! Yet, within the memories of physicians of twenty-five years' standing, this practice has been advocated, and, to some extent, adopted. The progress of medical conservatism has led to the abandonment of emetics as perturbatory and debilitating agents, excepting in the rare instances in which they subserve an explicit purpose.

The practice of the present time presents a striking contrast with that twenty-five years ago, as regards the use of counter-irritant applications. The physician whose professional career has already extended over that period, is sometimes reminded of the severe measures then in vogue, by the exhibition of indelible scars on the bodies of his old patients. He is not likely now to contemplate these traces of his former vigorous practice with lively gratification. Blisters, sometimes applied successively over the same space, and not diminutive in size, tartar-emetic ointment and plasters, issues, the moxa, etc., were considered as among the most efficient of the means of influencing the cure of a host of local affections. How much less frequently are they now used, and, when counter-irritation is deemed advisable, how much milder are the applications chosen! Physicians were strongly impressed with the belief that local affections were often removed by revulsion. They

accepted the doctrine of Hunter, that two diseases rarely concur, and, hence, that an artificial disease is likely to effect a cure by a process of displacement. Not only has this doctrine been disproved by pathological researches, but these have shown a large number of the local diseases formerly regarded as primary, to be the secondary or tertiary effects of morbid conditions then unknown. Bright's disease had not been discovered, and its multitudinous pathological consequences were, of course, unintelligible. In those days solidism prevailed, and hæmatology has been since created. Physicians made no account of blood-poisons, and the old humoral notions of coction and fermentation had not been revived under the modern but equally indefinite garb of catalysis. Mr. Farr had not invented the name Zymosis, a name expressive of our ignorance, rather than conveying any precise knowledge, but, nevertheless, significant of a wide and most important leap from the doctrine of solidism; or, in other words, of a passage backward, guided by the light of modern science, to humoralism, which, as Rokitansky remarks, is simply a requisition of common sense. This change in pathological views, in conjunction with clinical observation, has led physicians to distrust, more and more, the value of counter-irritant applications, and, at all events, to conclude that severe revulsive measures are rarely called for; hence, the change in practice is in conformity to the principle of conservatism.

The contrast as regards the use of mercury affords a signal instance of progressive change. The remarkable efficacy of this remedy in certain affections naturally led to the expectation of its utility in many diseases. Mercurialization being a disease, it accorded with the current belief of the incompatibility of different affections, to suppose that it displaced other diseases. It was considered as *par excellence* an *alterative* remedy; and what a latitude for imagined results was afforded by that title! Moreover, its supposed special action on the liver accorded with the notion that the secretion of bile had much to do with morbid phenomena. The relief or prevention of portal congestion was incidental to its hepatic effects. It lessened exudations; it promoted the absorption of morbid products; it altered the secretions; it dispelled local engorgements, and, by exciting stomatitis, it acted by way of revulsion. Waiving here, as in the other instances, discussion of the actual value of this remedy, the extravagance of the views formerly entertained is now sufficiently evident. The statements of those who have made war upon this article of the

materia medica, and the popular prejudices thereby produced, are equally, or still more, extravagant; but it is a remedy potent for harm when inappropriate, as it is powerful for good when indicated; and, therefore, the great change that has taken place as regards its use exemplifies conservatism.

These examples are sufficient to show how conservative medicine is illustrated by recent improvements as regards the employment of particular therapeutic measures. They furnish evidence of immense progress in practial medicine. Let not this statement be misunderstood. The improvements which have been noticed consist in the restricted use of blood-letting, cathartics, emetics, counter-irritants, and mercurials. Does the restricted use of these measures detract from their real therapeutic value? Not at all. Medicine has, by no means, repudiated them. She employs them with better judgment and discrimination; thus, availing herself of the good they can accomplish, she escapes the evils arising from their injudicious and indiscriminate use.

If we look at the progress of medicine during the last quarter of a century from another point of view, we find additional examples of conservatism. Regarding it exclusively from the point of view already taken, it appears that, in proportion as the practice of medicine has improved, reliance on certain active or heroic measures of treatment has diminished. This is true, but it is not the whole truth. Some measures are employed with much more freedom now than a few years ago. The use of opium and alcoholic stimulants, in certain diseases, affords the most striking illustrations of this truth. These instances also exemplify the principle of conservatism. Opium and alcohol, in excessive doses, occasion immediate disorder, of more or less gravity, and may destroy life. But given so as not to incur any risk of these effects, they do not conflict with conservatism, because their operation is transient, and, unless their use be continued, they do not leave behind them damaging effects. Given in quantities which are comfortably borne, they certainly do not impair the vital forces by perturbation, by loss of fluids, by affecting the constitution of the blood, or by inducing local changes, as do the measures previously noticed. This statement, of course, has nothing to do with the ulterior consequences, moral and physical, of intemperance or opium-eating. Here, too, as in other instances, discussion of the *modus operandi* of remedies is waived. Most physicians will agree in the statement that, when indicated as remedies, opium and alcohol sustain the vital forces. In this

respect they are positively conservative. But a point of distinction is, when not indicated, if given within certain limits, and not continued, they are neither spoliative, exhausting, disturbing, nor disorganizing, as are various other measures, and, therefore, not, like the latter, even then, antagonistical to conservative medicine.

The contrast between the practice of medicine now and twenty-five years ago is not less marked, as regards the use of opium and alcohol, than as regards the restricted employment of other measures. Let the practitioner, who has seen service for a quarter of a century, consider what a responsibility he would once have taken in treating cases of pneumonia with brandy and opium, to say nothing of the continued fevers. The wonderful tolerance of these remedies in certain cases of disease is a recent discovery. Let the same practitioner consider whether he would once have ventured on a hundred grains or more of opium *per diem* in a case of peritonitis, or grain doses of the sulphate of morphia hourly, continued for several days, in a case of dysentery. Let him consider whether, at the commencement of his career, with the fulminations of Broussais on incendiary practice resounding in his ears, he ever dreamed of the propriety of giving quarts of spirits daily to fever patients, and of finding the frequency of the pulse diminished, and the mind become more clear under this heavy stimulation!

If we turn from remedial measures to dietetics, we find that the improvement which has taken place in practice contributes to the illustration of conservative medicine. In fact, conservatism is, perhaps, not less conspicuous in the contrast as respects the diet of the sick than in any other point of view. In cases of fever, and all acute diseases, twenty-five years ago, it was generally deemed an essential part of the treatment to withhold alimentary supplies. It was a frequent saying to patients who craved food, that to allow it would be to nourish the disease. In chronic affections, too, the diet was usually much restricted. It was believed that a large majority of diseases were attributable, directly, to dietetic imprudences, and that the over-ingestion of food, during the progress of diseases, was, of all indiscretions, the most prolific of evil. Physicians seemed to loose sight of the plain fact that the vital powers must languish in proportion as the alimentary supplies fall below the wants of the system, and that death may be produced by starvation in disease as well as in health. At the present time, a nutritious diet is considered as highly import-

ant in the management of fevers, as well as in diseases which tend to destroy life by exhaustion, and most physicians appreciate the importance of keeping the body well nourished in chronic affections.

Incidentally a point for remark is here suggested. Twenty-five years ago disorders of digestion, grouped under the name dyspepsia, were extremely frequent. Dyspepsia was the popular malady of the day. The number of dyspeptics, of late years, has greatly diminished. The malady is comparatively infrequent. Why is this? I believe it to be explained, in a great measure, by the fact that in the matter of eating, instinct has regained its rightful supremacy. We do not hear so much now, as then, of the liabilities to dietetic errors. Physicians are not so ready to attribute diseases to some imprudence at the table. The subject is not brought to the minds of the people by means of conversation, popular books on diet, public lectures and sermons. The healthy man no longer sits down to dinner with fear and trembling lest he should eat too much, or indulge in improper articles of food. There are fewer patients who hold to the fanatical notion, that moral and physical health requires the demand of the system for food in sufficient quantity and variety, as expressed by hunger and appetite, to be resisted; and that the welfare of body and mind is promoted by living on a poor and insufficient diet. We rarely, now-a-days, hear the injunction, which was once impressed upon all who would preserve health, to adopt the habit of always rising from the table hungry. Nature and common sense have triumphed over these absurd ideas, and, among other advantages, dyspeptic ailments, which formerly tormented so many persons, have wonderfully diminished.

Recurring to the definition of conservatism in medicine, it suffices to say that it means the preservation of the vital forces. It is a principle in medical practice, covering everything which prevents impairment of, or tends to develop and sustain, the powers of life. The terms "vital forces" and "powers of life," although they are not readily explained, have a practical meaning, which is well enough understood, and it is unnecessary to enter into an explanation of them. It has been the object, in the foregoing pages, to give an exposition of conservative medicine, and to show that conservatism, in the sense in which the term is now used, is a distinguishing feature of medical practice at the present time, as contrasted with the practice which prevailed twenty-five years ago. The

development and adoption of this principle have been seen to be results of progress of medical knowledge, and the circumstances which seem especially to mark the beginning of the changes illustrating the principle are, abandonment of attemps to reduce the practice of medicine to a system, after the failure of the latest, viz: Broussaisism, and the study of the natural history of diseases, as inaugurated by Louis. It is by no means, however, intended to ignore the fact that the cultivation of all the branches of medical knowledge has powerfully co-operated to the same end. The changes which have taken place during the last quarter of a century have not been due to a prior recognition of the principle of conservatism; but now that the changes have occurred, we find conservatism to be common alike to all, binding them together, and constituting their most striking characteristic. Having reached the principle thus analytically, are we not bound to recognize it as a fixed principle of medical practice, and one possessing great practical importance? Assuming it to be such, the remainder of this article will be devoted to its applications in the management of different forms of disease. And, first, let us consider the application of conservatism to the treatment of patients with inflammatory.

Theoretical views led to the measures called *antiphlogistic* in cases of inflammation. These measures, consisting of general and local blood-letting, cathartics, and rigid or restricted diet, were considered as antagonizing the state of inflammation; not unfrequently arresting its progress, and, when not successful in this end, diminising its severity, limiting its morbid effects, and abridging its duration. As already remarked, the injury which these measures are capable of doing was overlooked; and, on the other hand, all will admit that their efficacy, in effecting the objects just stated, was greatly overestimated. Clinical experince has shown that we cannot rely upon these measures to arrest the progress of inflammation. Admitting the possibility or probability of success in a small proportion of cases, we are not justified in exposing patients to the injury produced if these measures do not succeed, when the chances are few that they will prove successful. This statement expresses a rule of conservatism applicable to all potent measures employed in any disease as abortive measures of treatment. Measures not impairing the vital forces are allowable, even when the probability of success is small. Opium, for example, is admissible as an abortive remedy when blood-letting is clearly inadmis-

sible. But measures which, if not successful, will do harm, are only to be resorted to when the chances of success preponderate over those of failure. Conservatism, therefore, does not justify the employment of the antiphlogistic treatment with a view to the arrest of inflammation, without taking the ground that they invariably fail.

(*To be continued in our next number.*)

ORIGINAL COMMUNICATIONS.

CASE OF OVARIOTOMY—SUCCESSFUL.

Reported by A. FISHER, M. D., Chicago.

Mrs. Thinius, a German lady, aged 47, of a bilious and nervous temperament, has had seven children, the youngest 14 years old; menstruation ceased 9 or 10 years since. First discovered a small tumor in the right side about a year ago. She said, however, that it soon disappeared, and about the same time she detected one in the left iliac region, where it has remained ever since, gradually increasing in size.

At that time, July 8th, 1862, she was much larger than women ordinarily are just before parturition. An indurated tumor could be distinctly felt in the left iliac region, circular in form and about six inches in diameter. It was movable in every direction and could be separated from the uterus two or three inches. Although the parietes of the abdomen were very much distended, hard and unyielding, fluctuation was perceptible in every part of the abdomen, with the exception of the space occupied by the tumor. She has never experienced any pain or inconvenience from it, except from pressure for the past two or three weeks.

The case was diagnosed, by Dr. Myers and myself, ovarian tumor with ascites; Prof. Allen afterwards saw the case with us, and confirmed our diagnosis. We told the patient that she

might get temporary relief by tapping; but the only hope of a permanent cure was extirpation of the tumor, and that would be a very severe and dangerous operation. After telling her the facts and even magnifying the danger, she concluded to have the operation performed.

Accordingly, on the 10th of July, after evacuating the patient's bowels freely, she was placed upon a table properly prepared, and soon brought under the influence of chloroform by Professor Allen, who kept her fully anæsthetized, carefully watching her during the operation, which was performed in the presence of Drs. Myers, Macalister and Rogers, who assisted me. The operation was commenced by making an incision in the linea alba below the umbilicus two or three inches in length into the peritoneal cavity. Two or three gallons of clear serum was evacuated from the peritoneal cavity, and three or four quarts from the sack attached to the tumor. Finding no adhesion, the opening was enlarged to about six inches in length. I then introduced my hand and drew out the tumor with the sack, and passed a needle around with a double ligature through the pedicle, as near the tumor as possible, leaving enough exterior to it when separated, to prevent the ligatures from slipping off. The ligatures were strong and tied very tight. The tumor was then cut off and the pedicle kept exterior to the wound by an assistant. After examining the right ovary, and finding it healthy, I carefully sponged out what serum remained, and brought the edges of the wound together, and retained them in position by deep sutures, being careful not to include the peritoneum. The pedicle was then confined to the lower edge of the wound, by a stitch through it and the abdominal integuments, leaving the ligatures exterior to the wound. Adhesive plasters were then applied, and the wound dressed with lint compress and bandage, and the patient carefully placed in bed.

On examining the parts removed, we found the ovary very much indurated, and about the size of a small hen's egg, and attached to a tumor circular in form, and about six inches in

diameter, two inches thick in the center, rounded on the external and flat on the internal surface, so as to form an edge at the circumference, with a thick membrane proceeding from the edge of the tumor, forming a sack which contained three or four quarts of serum. The tumor with the sack very much resembled in form the placenta with its membranes attached. Both surfaces of the tumor and sack were smooth and appeared like the continuation of the peritoneal membrane thickened. The structure of the tumor was fibrous and very much indurated.

As soon as the effect of the chloroform passed off, after the operation, a full dose of opium was given to confine the bowels and allay irritation. Her pulse was then 65 and rather weak. I remained with her an hour; during that time her pulse came up to 75. As she was very comfortable, I left her. Dr. Myers saw her with me at 4 P. M.; reaction was fully established; pulse 100, soft and full; rather restless, but complains of no pain; gave morphine half grain, and ordered ice water in teaspoonful doses to wet her mouth. 10 P. M.—Pulse soft, full and regular. Slight efforts to vomit. Drew off 6 or 8 oz. of urine with the cathether. Prescribed a full dose of morphine, and continued ice water.

11th, 9 A. M.—Pulse 95; skin nearly natural; tongue slightly coated; voided 4 or 5 oz. urine. Complains very little of pain or tenderness of the bowels. ℞—Morphine gr. ss, if she has pain or is restless; diet, rice and barley water in small quantities. 4 P. M.—Pulse 90, soft and full; drew 8 or 10 oz. urine. ℞—Morphine gr. ss, if necessary to keep her quiet.

12th, 9 A. M.—Rested well last night; pulse 90, soft, full and regular; bowels neither tender nor tympanitic; tongue moist; no thirst; every way comfortable. Evacuated the bladder and continue morphine if necessary. 10 P. M.—Pulse 80. She has some appetite, has taken two or three small crackers in coffee. Evacuated the bladder; urine nearly natural. Continue morphine.

14th.—Feels very comfortable this morning. Removed the dressings from the wound, which appears to be entirely united. As there was no suppuration, the sutures were not removed. ℞—Continue morphine if necessary.

15th.—Pulse 86 and natural. Passed some blood with her urine, and has some pain in the region of the bladder; otherwise comfortable. ℞—Continue morphine if restless.

16th.—Feels well this morning. Pulse 75; urine normal. Removed the sutures; wound entirely healed, except around the pedicle. Every way comfortable.

17th.—Bowels moved for the first time since the operation, by an enema. Appetite good. She wants to get up, but advised to keep the bed, except to evacuate the bowels or bladder.

23rd.—For the last six days she has continued to improve steadily; has been up a number of times. Pulse 70 or 80; appetite good. Ligatures came away to-day, and the pedicle slipped into the peritoneal cavity, leaving no perceptible opening. Continue adhesive plaster and bandage to support the relaxed abdominal muscles. The bowels being rather constipated, prescribed a dose of castor oil.

24th.—Oil moved the bowels freely. Feels well; appetite good; pulse 75, soft and normal; tongue clean; no disturbance of the bowels.

27th.—I did not visit her for the last three days. She has been steadily gaining strength; appetite good; bowels moved every day, once only; sits up an hour at a time without inconvenience.

30th.—Found her up and dressed, packing her clothes to go home, to Lacon, Marshall Co., Ill. I was surprised, for I warned her not to walk about until I saw her. She said that she felt just as well as ever, and ought to be at home to attend to her affairs. I prevailed on her however to stay until Tuesday, the 5th of August, when she left, feeling every way perfectly well, making 26 days from the time of the operation.

I received a letter from her daughter, dated August 10th,

saying that her mother got home well, though was very weak, but that she soon got rested, and was gaining very fast.

Another letter, received August 24th, reports complete recovery.

Remarks.—On examining the reported cases of ovariotomy, we find, that in nearly all of those that prove fatal, that death is caused, either by the *shock* of the operation, hemorrhage either primary or secondary, or inflammation from the injury and exposure of the viscera.

In this case the shock was not at all severe. The patient survived it to admiration. With regard to hemorrhage, not an ounce of blood was lost. Having the pedicle exterior to the wound, we drew the ligatures so tight that the circulation was completely cut off, thereby preventing the possibility of hemorrhage, and hastening the separation by the ligatures. The ecraseur has been recommended to bruise off the pedicle. We had one at hand, but fearing the possibility of hemorrhage, concluded not to use it. The result shows, that in this case at least, it could not have been better than the ligature.

Finally inflammation, which is most to be feared after ovariotomy, was prevented or opposed by keeping the patient on her back, without suffering her to raise up on any condition; evacuating the bladder with the catheter as often as necessary; giving little or no nourishment for the first few days; confining the bowels until the wound was healed; and keeping the patient perfectly quiet and free from every irritating cause.

The two last indications were admirably accomplished with morphine, which, in fact, was the only medicine given, with the exception of a dose of castor oil on the thirteenth day, and a dose of opium immediately after the operation.

ARMY CORRESPONDENCE.

Huntsville, Alabama, Convalescent Barracks.

The mails have been so irregular, that I have refrained from writing heretofore. Having the good fortune to receive a letter of two months age, I write you hoping that you may receive this as soon.

Those who came down sanitarily with amputating cases and desires before Corinth, were doomed, you remember, to cursing and disappointment. I, with previously exalted ideas of Kentucky mammothness, chivalry, hunting and health, have been doomed to the latter only, leaving the cursing to those who can do the subject scientific justice.

The scales have fallen from my eyes, and the comparative microscopy of Kentucky soldiers, while placed in contrast with Northern troops, glaringly appears. The Kentuckians do well in the fight, but in the camp they are worse than useless. They take no care of the camp, of their equipage, or of themselves. I have been connected with one of those regiments, and speak with authority. The testimony of hospital surgeons is, that too great a proportion of Kentucky troops are "hospital pets," and frequent Convalescent Camps and Barracks.

Most of the diseases are chronic diarrhœas and remittent fevers. Both need stimulants. Diarrhœas yield to no local treatment. They must be attacked constitutionally. Whiskey and quinine, with some aromatic and warm spice, is the most successful remedy. How depletants can be used successfully in the army, I see not. A *good article* of whiskey saves more men than any Patent Medicine man ever *advertised* to do, from Townsend's Sarsaparilla to Day & Martin's Blacking. This from me, a thorough going and absolute tee-totaller, is strong language, but I cannot abate from it.

The familiar treatise on Alcohol will not find many converts

in the army, and I think that a few months service down here would correct many of the views of "the father of the American Med. Ass." Alcoholic stimulants are absolutely indispensable to maintain life in many, who will return home, and shortly be able to re-enlist.

Remittents do not succumb to the use of quinine so quickly and universally as with us. Larger doses are necessary and often imperative. I rely much on rest, good diet, and a plentiful use externally of cold water, during the accession of the fever. Arsenic does better as an antiperiodic, than with us even; but anything except quinine is difficult to obtain. That, however, is probably owing more to the neglect of the regimental surgeons, than to any defect in the Medical Purveyor's Department.

Scorbutus is prevalent, but in a mild form, showing itself first in sore mouths, which quickly yield to chlorate of potash. "Cold sores" in the mouth become a species of indolent ulcers, but over which nit. arg. exercises no control, excepting to make them worse. If a soldier has had the misfortune to have a broken bone in years previous, the scorbutic state occasions great pain in the neighborhood of the fracture, while at other times the limbs become œdematous and weak, insomuch that they are of no use to the patient.

To scorbutus, I place often the indirect cause of diarrhœa. The men craving vegetable food, on every occasion that presents itself, rush to every excess, including green watermelons and all kinds of young weeds, as "greens." Such trash cannot be imprisoned with impunity in an enfeebled stomach and intestines, and the imprudence results in a stampede on the part of the intestines, and a general "run on the bank," till the offending matter is removed. Soldiers generally cannot be fools; according to the old adage, experience teaches fools: for experience teaches the soldier nothing. Nothing alarmed at the previous course of watermelon treatment; the soldier embraces the very first opportunity to repeat his suicidal action, and soon becomes exhausted beyond remedial aid. It

would seem that many of the soldiers in coming to the army, left their quota of common sense at home, relying solely on the force of circumstances, to rejoin it at the end of the war.

Typhoid fever is not so common as I expected to find. "Camp fever" does not decimate our troops as the fearful fogies of editorial-physic tendency, predicted when advocating a progressive "On to Richmond" movement. It is almost always complicated with a scorbutic taint, and after a comparatively short course tends to a typhus rather than a typhoid condition; the tongue is red and raw like a raw steak; the patient unconscious or wild and muttering; the pulse quick, weak, and intermittent. To this state camp fever usually tends, unless met early with stimulants, and par excellence, alcoholic.

Nostalgia is another disease which is not a stranger to us. I had one case whose inception occurred soon after I had discharged 45 men from the regiment at one time. He gradually lost his appetite, lost his spirits and ambition; took no notice of any one, but a surgeon whom he always pestered for a discharge, alleging that he knew he shouldn't get well, although he complained of no pain. At last he became so emaciated, that I sent him to the hospital, where he was carried forth one morning to rest in his long home.

I have had cases of another disease, whose symptoms are as varying as Proteus. It generally occurs just before a battle is expected, and is oftenest seen among the officers, particularly captains and lieutenants; sometimes diarrhœa, or tormina and tenesmus, sometimes like cholera morbus, almost always attacking the alimentary canal somewhere; sometimes the patient has every symptoms of disease you can mention, and a general sense of "feeling awfully." They always recover when the necessity of a battle is over.

The closing of the mail puts an end to these rambling notes.

Yours Respectfully, D.

EDITORIAL AND MISCELLANEOUS.

Cantharides as a Therapeutical Agent.—Alex. McBride, M. D., U. S. Vol., in the *Lancet* urges that in cantharides the profession have one of the most potent agents "to re-kindle the warning spark of vitality—an agent which in many cases of disease, at an almost hopeless stage, will rally the scattered and almost dissipated vital forces, concentrate and generalize their action and re-establish that series of atomic changes upon which vital action depends.

He argues that the principal effect of the fly vesicant is really attributable to the absorption and general action of the active principle of the cantharides. He has used it in the depressed stages of typhoid fever with pulmonary congestion, in "sinking" chills, in partial paralysis with constipation, in coma with scanty heavy urine, in pneumonia with quinine, in gangrenous erysipelas, in poisoning by animal fluids, in hysteria accompanied by profuse leucorrhœa, in cholera, etc., etc. The general indication for the use of this potent remedy he italicizes as follows:

"*When in atonic, asthenic or adynamic disease it is a desideratum, from whatever cause, to produce general or local capillary tonicity, the internal use of cantharides will be indicated, and in quantity proportioned to the urgency of the demand.*"

Dr. McBride administers the medicine in much larger doses than those ordinarily directed. One fluid drachm, he says, will generally be sufficient, but in severe cases he would not hesitate to double the amount. The effect will be manifested twenty minutes or less. Smaller doses may be repeated in from one to two hours after. No more should be given than sufficient to accomplish the general object, and its administra-

tion should not be trusted to any other judgment than that of the physician himself. He admits that it may do mischief when given too largely, or on improper and false indications; but, like mercury, it will do *something* in any dose. From the theoretical and practical considerations he derives the rule: "*Cantharides may be given in free doses (in cases where indicated) as long as the urine continues of a darker color than pale amber.*"

Strangury does not occur as long as the urine is copious and heavy. When it does occur he regards it as a good symptom. He has seen no evidence of its supposed aphrodisiac action.

We can not look upon Dr. M.'s article as establishing more than the well known fact that the *cantharis* is a powerful but *unmanageable* stimulant. The large doses recommended we have no doubt may be safely employed so long as the kidneys rapidly eliminate the active principle, and precisely there the difficulty commences—failure to eliminate will of necessity entail the poisonous effect.

It is unnecessary to state, after the remarks made last month in this JOURNAL, that we dissent entirely from the author's suggestion that the external application of the fly is beneficial mainly from the absorption of its active principle and consequent systemic impression. Nevertheless it is true in vastly the larger proportion of cases, if not in all, that when the "blistering point" is reached, internal support and stimulation is ordinarily indicated. We regard the article as valuable as being among the many evidences every day accumulating that the deplorable "antiphlogistic" treatment so often carried to death's door, is subsiding to its appropriate level and material disuse. The atrocious paradox of "pulling down with one hand whilst building up with the other"—deemed so profoundly sagacious by some medical theorists—is receiving rapidly its ultimate quietus.

Alcoholic Stimulants in the Army.—The Cincinnati Academy of Medicine, reported in the same journal, in a discus-

sion upon the subject of army diseases appear to have pretty generally agreed that the judicious administration of alcoholic stimulants is necessary to the health of soldiers in active service. Otherwise the causes tending to enfeeble digestion become still more energetic in action and influence, and concurrently camp diarrhœas, typhoid fevers and conditions, erysipelas, etc., etc., prevail. This is an emiuently correct view of the case, and we are out of all manner of patience at that counterfeit and base "philanthrophy" (!) which has robbed the soldier of this physical necessity. It is all very well for dyspeptic parsons to thunder phillipics from their pulpits and coin adjectives and denunciations in their easy chairs; it is all right enough, we suppose, for Congressmen, torpid with costly Cogniac and Champaigne, to pander to a sickly sentimentality among their radical constituents at home, and thus the soldiers be robbed of one of the prime necessities for health—but, let it be remembarcd, a fearful reckoning is being made up.

The moderate spirit ration is not conducive to intemperance, but positively a preventive. Whatever the mental habit of the soldier, the body will claim its rights. The articles of war cannot control the facts of physiology and common sense. The Maine liquor law applied to the army results much as it did when applied elsewhere. The pent up physical want of the soldier explodes in a volcanic excess of drunkenness the moment opportunity offers, and the history of this war, as of all wars, shows that opportunities do now and then occur in spite of the "regulations." The natural result is disease from the excess—just as the starving man endangers his life from unchecked voracity, whereas when moderately fed he eats *tuto et jucunde.* The occurrence of disease from the excess is charged upon the stimulant, and "tee-total" objurgations deafen all ears. It is time that this folly should cease. Practically it is being put to an end by some of the more sagacious commanders in spite of "red tape" and the clamors of easy going theorists, wrathfully

reforming the world in their carpeted chambers at the cool North. One way is by putting a little Quinine in a comfortable drink of whiskey as a *prophylactic.* Another way is by sending the soldier to the hospital or his home, where clear-sighted medical men know what is necessary and direct it with discretion. In our view prevention is better than cure.

It is to be expected that some dilapidated temperance lecturer, whose mental hull is laid up in ordinary, covered with barnacles, will launch out once more upon the sea of doleful platitudes when he reads what we have written. It is to be expected thot some physiologic *sardine* will writhe and wriggle, in his oily packing, at the remote suggestion that his slumberous beatitude of hybernating humanitarianism is disturbed. But the plain truth is, "teetotalism" is just as applicable in the army as vegetarianism, and the arguments to sustain the one are precisely those to sustain the other. Some men have lived and do live without meat, and some men have lived and do live without meat, and some men have lived and do live without stimulants. Some have died from gluttony and some from intemperance; but eating and drinking may still be set down as consonant with life and health.

It is unfortunate that some medical men will still give way to this depraved sentimentality, just as they still too often listen to the fears of patients and attendants that nutritious food, the first element of success in the treatment of most, if not all, diseases, is dangerous in fevers. The professional follies and delusions of one age infallibly become the popular opinions of the next, and he is a man of more than ordinary influence and strength of mind who can always, or even often, combat them with success.

It is safe to say that this whole subject of alcoholic stimulants needs re-statement by the scientific men of the profession. The contra-stimulant doctrine is already, with the starvation system, practically consigned to "the tomb of all the Capulets."

Iron in Chlorosis.—The remark is attributed to TROUSSEAU, that preparations of iron given in cases of chlorosis with a tendency to tubercular disease, favor and hasten the development of the tubercles. It is therefore observed as important that cases of true chlorosis should be carefully diagnosed from pseudo-chlorosis. This opens a rich vein to the medical satirist; but by no means wishing to assume that character, we call attention to the strikingly apparent fallacy involved in the statement. The inference is that chalybeates are useful in the one, and not in the other—that chalybeates *per se* favor in some cases the development of tubercles. As though in either case there was a chance for antidotes, or for adjuvant poison. Such notions only tend to mislead. The chalybeate stands upon the same footing with any other medicine in such instances, and no Gallic refinement of diagnosis can do away with the stubborn fact that if the medicine improves the appetite, digestion and assimilation, it will be useful, whether the chlorosis be "true" or "pseudo"—if it impairs these, it will favor tuberculization. Tuberculosis is not to be met by antidotes, or prevented by ingenious combinations of drugs. The duty of the practitioner is to secure a bath of healthy blood for the diseased part—to see to it that the forming blood be provided with suitable material out of which to build up and repair tissue, an end to be secured, not by specifics based on strained dilettante distinctions, but by careful and comprehensive view of all influences operating on the patient, and restoration of normal physiological conditions. Is it not about time to quit this constant inquiry for specifics? Let the homœopathists have the full monopoly of the nostrum and panacea business.

Local Treatment of Diphtheria.—DR. WELLER, of Evanston, informs us that he has relied in several cases of severe diphtheria upon local treatment alone, and with marked success. He has found the best result from a lotion of Hydrarg. Bichlorid, one grain to eight ounces of water applied freely

to the affected parts every four hours. Next to this, he ranks a dilute solution of Perchloride of Iron. In some instances, alternation of the two at intervals of two hours seemed particularly efficient. He has promised us details for an early issue of the JOURNAL.

Prophylaxis of Diphtheria.—M. LOISEAU commends as a prophylactic when epidemics of diphtheria prevail gargles or lotions of aqueous spirituous or ethereal solutions of tannin, the strength varying with the age and susceptibility of the patient. A few drops may be swallowed each time. The addition of Chloroform to the alcoholic solution is occasionally useful. There seems to be a great diversity of practice among physicians, based mainly on the fact that some believe diphtheria to be only a local affection, others that it is a constitutional disorder.

Nitric Acid in Pertussis.—DR. BARKER, in the N. Y. Academy of Medicine, stated that he did not think Nitric Acid was applicable in the first stage of whooping cough, prefering at that period small doses of Tinct. Rad. Aconiti with rubefacients over the upper part of the chest posteriorly and anteriorly. After subsidence of inflammatory symptoms, free imbibition of nitric acid lemonade—fifty or sixty drops of the dilute acid to a tumblerful of water. He recommended also ℞—Syrup Lactucar, ʒj; Ext. Belladonna, gr. ½; Quiniæ Sulphat, gr. ss. M.—To be taken three or four times a day.

Alcohol in Purpural Hæmorrhage.—Rapid and prolonged intoxication is recommended in the *Gazette des Hopitaux* as a remedy in cases of profuse hæmorrhage depending on purpura A most efficient combination for this purpose is made by adding to the alcoholic stimulant full doses of Sp. Terebinth.

Chlorinated Soda in Scarlatina.—A writer in the *London Lancet*, July, 1862, reports several severe cases of anginose

scarlatina, with typhoid prostration, successfully treated by internal administration of solution of Chlorinated Soda. From twenty to thirty mincins were given in Camphor mixture every hour. The solution was also used as a gargle. Brandy was also given internally in doses of about four ounces daily in one of the cases reported. The Sulphuric Acid was given as a tonic during convalescence. Probably the local application of the solution and the brandy were the really efficient agents. However, as there is always a great anxiety to "give something" in severe diseases, the Chlorinated Soda, in the doses indicated, may be given with as much confidence as the Chlorate of Potash—even though it will scarcely be claimed as "oxygenating the blood."

Arsenic in Onychia Maligna.—Mr. Curling, in the London Hospital, treated a bad case of onychia maligna of the great toe by first poulticing and removing the slough, and then applying a lotion composed of equal parts of Liquor Arsenicalis and water. This caused severe smarting and burning pain which lasted two hours. Several hours after, it was again poulticed and a grain of Morphia exhibited. The sore was thus treated on four alternate days, the pain caused being less each subsequent application. Strips of lint soaked in solution of Nit. Argent. were then applied, the edges of the ulcer supported, and at the end of a month the patient was discharged perfectly cured. The case had been one of marked severity for a long time, having required excessive doses of opium to alleviate the intense pain—often as much as one or two ounces of Laudanum daily. The local alterative effect of the arsenical solution was very striking.

Lotion for Infantile Erysipelas.—M. Loiseau has used in many cases of erysipelas around the vaccine pustule in infants a lotion composed of tannim dissolved in brandy, with the addition of a small quantity of chloroform. The application is repeated at first at intervals of ten minutes, gradually in-

creasing the space to half an hour or more. It promptly relieves the pain and checks the spread of the disease. M. Loiseau thinks it probably applicable to erysipelas arising from other causes.

Asphyxia from Chloroform.—Dr. Wm. Marcet, argues in the *Med. Times & Gazette*, that asphyxia from Chloroform is owing not only to its anæsthetic properties, but to its producing spasm of the glottis. He therefore urges, when this occurs, tracheotomy as well as continuous artificial respiration.

Chloroform in Otalgia.—Dr. Pattee, in the *Jour. of Mat. Med.*, recommends, in earache, to put a little loose cotton in the bowl of a common tobacco-pipe, drop on it eight or ten drops of Choloroform, cover this with another pledget of the cotton, then place the stem to the affected ear, and blow steadily into the bowl so as to carry the vapor directly into the ear.

Tannate of Iron and Collodion to prevent Pitting by Small Pox.—Dr. Thompson, at a late meeting of the N. Y. Co. Med. Soc., remarked that at the Quarantine Hospital they used a mixture of Collodion, Tannin and Iron with good effect in preventing pitting; the object of the mixture being accomplished by excluding the light with the black mark thus formed.

It is probable that the various measures proposed accomplish the object, if ever, by diverse methods, some as cauterants by aborting the pustule, others by relieving inflammation directly, and others indirectly by excluding the air and light.

Pernitrate of Mercury in Solution is strongly recommended by Dr. Gay, of the Great Northern Hospital, in cases of epithelial cancer, lupus exedens, and indurated chancre. The application causes great pain for an hour or two, but when the slough separates, a healthy granulating surface is left. It seems to quicken the energies of the healthy tissue, so that

no sooner is the disease gone than the wound is almost cicatrized, and that without the loss of tissue sustained by excision. The application may be made twice a week until all traces of local disease have disappeared.

The Mitigation and Suppression of Venereal Diseases.—This subject is one which is attracting the attention of the sanitary associations in most of the large cities of Christendom. Many plans have been suggested to meet the evil, but there are practical difficulties in the way of every one which has yet been brought forward. Meanwhile, the steady spread and increase of venereal diseases has become such as to awaken the most serious alarm, not only of the philanthropist, but of the political economist. The columns of the secular papers are rank and offensive with the obscene lucubrations of advertising knaves. Wherever the careful owner of a corner lot has put up the notice "Commit no Nuisance," the injunction is fearlessly disobeyed, by numberless posters of "Sacred Retreats," "Lock Hospitals," and "Confidential Advisers," warranting speedy cures without mercury. Fortunes are amassed by these vultures, whilst the healths and constitutions of their dupes are left in ruins. Those who have not examined into the subject, have no conception of the frightful waste of property, morals, health and life involved; but a morbid public sentiment still prevents proper action in the premises. Publication of the appropriate methods for mitigating and suppressing this master evil, is out of question. It can be met only by a quiet but relentless despotism—a despotism which can easily be so regulated as only to affect the evil doers—the fountains of this corroding pestilence. Boards of Health and Sanitary Police must assume power in the premises, and the evil can readily be shorn of its enormous proportions.

Penetrating Wounds of the Brain.—Recent cases have robbed the "crowbar case" of its solitary pre-eminence. Beaumont, of Toronto, reports a penetrating wound of the brain,

produced by a broken rocket shaft through the left orbit. The stick was extracted from the part with great difficulty. It passed almost directly backward nearly parallel with the mesian plane, apparently through the sphenoidal fissure, and into the base of the middle and posterior lobes of the left hemisphere of the brain. Its extraction was followed by a profuse rush of blood, a stream almost as large as the extracted shaft; but the bleeding almost ceased in five or ten minutes, iced water being applied over the forehead and upper part of the face. He did not even faint, and in fifteen minutes got up and walked. With the exception of application of iced water, and strict rest, little or nothing was done or ordered. Recovery was complete, with the exception of loss of the eye, paralysis of the parts supplied by the infra orbital branch of the superior maxillary nerve, and some imperfection of memory of matters which occurred subsequent to the injury.

In an instance recorded by Dr. A. H. Stephens, of the 6th Ohio Volunteers, in the Cincinnati *Lancet*, a minie ball proved almost as harmless as a homœopathic pill. We quote from the Doctor's account:

"One man was carried in on Monday. I could learn nothing of his case save that he had been found on the field insensible. He was perfectly comatose. On examination, I found an opening through the scalp and cranium, into which I introduced my finger full length. Finding the cavity filled with fractured bone, coagula, etc., I enlarged the opening of scalp to the extent of two or three inches, and removed a portion of the lower border of parietal and a larger part of mastoid process of temporal bone, then introduced the forceps and removed an ounce Minie, which had buried itself about two inches within the brain; but in removing the ball about three ounces of brain matter escaped. I replaced the integuments and dressed the wound as well as the case would admit, and placed the patient in his bunk to die; but in twenty-four hours his coma had quite left him, and he was rationally and loudly calling for water and indulging in many soldierly expletives to all who did not instantly attend to his wants! At the expiration of seven days, when he was placed on board of a boat to be transferred to a hospital, he had every appearance of a perfect re-

covery without the slightest relic of paralysis, and he informed me confidentially, that in four or five weeks he would return to 'crack the d—d butternut that hurt his head.'"

This occurred at the Shiloh battle. Verily, we shall begin to believe that brains are of little use in war-time.

En passant, we have information of a case where a surgeon poked a probe around in the brain, in search of a *Minie*, with a *sang-froid* that astonished the bystanders, but this man *died*. The surgeon recovered.

Amputations in Military Hospitals.—Dr. Sanford B. Hunt writes the Buffalo *Med. Journal* that operations on the field have proved more successful than secondary operations, adding but little to the general shock, even when high up on the thigh. Yet, he says, there are a vast number of exceptions, which should be borne in mind by the ambitious field operator. Thus cases of bullet wounds of the upper third of the thigh where the missel is buried in the femur without absolutely fracturing it. So also in wounds of the joints, especially of the elbow, which somehow endures disaster better than any other. Referring to the exploits in hospital of certain "distinguished operators," he eulogizes Brigade Surgeon John W. Hunt, of Western New York, (a namesake, but not a relative, of his,) who, on taking charge of the Mill Creek hospital, carefully locked up the surgical instruments and relied on a pair of scissors and a forceps. He certainly killed nobody, and the reporter thinks largely decreased the mortality, besides saving many useful limbs. He states that the conservative surgeons at Fortress Monroe trusted very little to resections, and did not hesitate to condemn their frequent employment. The proportion of operations to patients in the hospitals he says scarcely averages one per cent. "It remains to treat the majority *pro re nata*, to apply cerate to the kindly wounds, and water dressings to those inflamed, to watch carefully their cleanliness, to support with wines and tonics under exhausting discharges, to temper irritability with opium, and to secure for them as good a diet and as pure an

air as circumstances will permit."——Which convinces us that Dr. S. B. H., whilom editor of the Buff. *Med. Jour.*, has progressed since he wielded a critic's pen some eight or nine years ago. The war is having some good influences at least on the profession. The importance of nutritious diet and judicious use of opiates and stimulants is now pretty generally recognized among surgeons. Free ventilation and absolute cleanliness are also gaining in favor among them, although still almost wholly ignored by barrack builders, (witness the cattle sheds called barracks at Camp Douglas!); but, alas, physicians too often still imitate the boiling oil of ante-Pare times, or the healing salves, knives and saws of later times. Whereas the truth remains that the internal wounds produced by disease, about equally necessitate the same things. But patience!—the world moves—*Speculo ad alteram.*

Excision of Joints.—In a paper read before the Royal Med. and Chirurg. Society, by Dr. G. M. Humphrey, on the influence of Paralysis, Dis. of Joints, &c., on the growth of the bones we find the following conclusion, among others, of practical interest:

"*Excision of the knee*, if the epiphysial lines are removed, is followed by marked arrest of growth in all parts of the limb. If the epiphysial lines are spared, the growth, in most instances, keeps pace with that of the opposite limb." Preceding diseases, or invasion of the epiphysial lines by the suppurating process may modify this statement. Nevertheless the fact is so constant that every effort should be made to spare these lines, so that the limb, especially in young and growing subjects, may reach its maximum of perfection. In some instances the possibility or impossibility of choice in this respect may determine the selection between exsection and amputation.

During the discussion of this paper before the Society, Mr. Barwell and others adduced cases where local abscess had destroyed the epiphysial lines, resulting in permanent loss of

elongating growth in the bone. Paralysis, anchylosis, &c., probably diminish the growth of the bone and soft parts by the loss of exercise involved.

Iliac Aneurism.—Professor Syme, of Edinburgh, recently remedied a case of iliac aneurism by opening the sac and tying the common iliac and both the external and internal iliacs. A screw clamp of peculiar construction, provided by Prof. Lister, of Glasgow, was employed to effect compression of the abdominal aorta, and when this was complete the sac was opened through all the textures concerned, by a free incision, and about six pounds of blood and clots scooped out. The ligatures separated on the nineteenth day, everything having progressed in the most favorable manner. It may be remarked that the ligatures were applied close to the sac—Prof. Syme observing that it was no more likely that the artery was diseased near to than remote from the rupture. This bold and decisive assertion, justified in its successful result, was strongly urged by Prof. S. as negativing Hunter's supposed universal rule—as for example, in axillary aneurism, where the vessel is easily reached at the point of rupture, and with great difficulty, as well as danger, tied above the clavicle. The modification of practice in such cases is altogether analogous to Mr. Guthrie's ligation of arteries at the part wounded rather than at a distance on the proximal course.

"*Bock Agen.*"—"Monsieur Tonson has come again." The Brigadier still claims the benefit of our columns for advertising purposes. We believe our correspondent must have been mistaken when he spoke of him as being of the German persuasion. At all events, he has lived in Yankeedom long enough to be up to the latest Yankee advertising dodges. Notoriety, the Brigadier evidently believes, is the next step to fame. Once to have people read his name in print, and then, by a *ruse de guerre*, make them believe the animal is a true lion and not the other quadruped, or "Bottom the weaver." The actual cautery applied to the Brigadier's back first, sent him braying and prancing up and down the columns of the Ex-Governor's paper as the victim of his "nationality."

That dodge was found not to work, although he scattered his melancholy lucubrations into the possession of every surgeon, suspected of being an "adopted citizen," throughout the grand army. The surgeons of adopted citizenship saw through the leonine skin, and recognized the unmusical bray.

Still writhing under the unappeased smart, a contemporary has hitched him to the ambulance of their college and tries to make him do duty in taking not only himself, but them, out of the field—trusting that his struggles might prove more successful than those of their recently discarded patron saint. It won't do!

In the multiplicity of demands upon our correspondent's time he finds no present opportunity, even did he deem it necessary, to reply to the elaborate tissue of misrepresentations which the Brigadier and his associates have so wearily woven. Too many cooks have spoiled that broth—there is no coherency or compatibility to its parts.

The Brigadier says at the outset that he did not have charge of that boat; but, as he afterwards states that he had, and and gives details to show that he had, the Brigadier simply contradicts the Brigadier.

The Brigadier says that the Chicago *Tribune* failed to return either his communication or his postage stamps. We commiserate the Brigadier, and candidly admit that the *Tribune* folks ought to return his stamps.

The Brigadier says he scarified the eyelid to relieve the œdema and intense pain with which the patient was continuously screaming, and not to evacuate pus. Our correspondent is prepared to prove by affidavits if required, that the patient was not screaming, had not screamed and did not scream until the Brigadier incised and *squeezed* the part; that the Brigadier asked our correspondent if he did not think there was pus in the part, and without waiting an answer enlarged the wound "near the left eyebrow"—not in a depending part, but above the accumulation, whatever it was. In common with all good surgeons, our correspondent believes that incising an eyelid to relieve œdema is bad surgery always.

The Brigadier writes that our correspondent had some degree of responsibility about the application of some splints to a German soldier with a femur fractured by a gun-shot. The only thing our correspondent had to do with the case was in assisting Dr. Gillette to apply some splints the latter was agent for. He had first applied some short splints, there being none other to be had. All the rest of the Brigadier's

statements upon this point are simply false, and his insinuations dastardly.

It appears, also, that the Brigadier never heard of trephining the spine, and ridicules the idea of searching for a ball which might have depressed one of the vetebral laminæ. In the case alluded to there was paralysis of the sphincter ani, bladder and lower extremities. In accordance with the most importunate entreaties of the patient, he was anæsthetized and search made for the ball with the bare chance that it might be reached and the patient be saved. Without the operation, death was inevitable—with it, there was a remote hope. There was no bloody cutting, no squeezing, no screaming—but a painless sleep during which there was an attempt to give a patient his last and only chance. The result was unsuccessful, but the attempt none but a donkey, (or a Brigadier,) with his hide still smoking from the branding iron, dare say or insinuate shortened life an hour.

The notoriety-seeking Brigadier says that the Medical Director, understanding his lamentable physical condition, sent "a very respectable medical officer" to assist him. This very respectable medical officer was Dr. Stahl, of the 10th Illinois. This identical gentleman told our correspondent that the Medical Director sent him because the Brigadier was incompetent —what further he said or did might be written, but the Brigadier might as well drop it here.

Our correspondent was informed in so many words by Dr. Isham, of the Sanitary Commission, that he was to take charge of the boat, and accordingly went to work systematizing matters. He was brought up with a round turn by the Brigadier asking the Medical Director who had charge of the boat. "You," said the Director, whereupon our correspondent subsided. Up to that time our correspondent had not seen the Director, so that if any unfavorable influence had been exerted on him, it was not by our correspondent.

The getting off of the boat was *verbatim* as described by our correspondent. The Brigadier, in denying it, shows that either his memory or his moral faculties have been impaired by his "*wounds.*"

The Brigadier winds up his advertising circular by triumphantly asking our correspondent why he does not join the army? We have asked the same question, and received this reply:— "Because I am afraid I should get to be a Brigadier—should get on my horse some nice day and ride leisurely on to the battle field, a shell should explode, scare my horse, he fall

down on me and tear my cap, and hold me until I was "outworn to death nearly," should then have to be ambulanced to a convenient boat to get home; "go lame" when any of the medical or other officers were about and go straight when they were not; come home and stay several months on pay while I was doing nothing, instead of resigning for the good of the service when I found myself worthless in it; should devote my leisure to writing scurrilous articles to the secular and medical press, when I ought to be posting upon the army regulations, and perhaps moderately on ophthalmic surgery."

Candidly we think our correspondent more than half right. We have devoted more space to this Brigadier than we intended; if he wishes further notice he must get it elsewhere, even though he seizes an initial as the excuse for attacking the position of a Professor in Rush Medical College. In our humble opinion a teacher in a respectable medical college at the present time occupies a position which in responsibility and importance is second to no other. The point does not need argument; military schools are trivial in importance beside the medical colleges. As a teacher of Anatomy, the tongue of the rankest calumniator dare not whisper a word in detraction of the splendid abilities of the gentleman whom the Brigadier singles out as the object of his venomous spleen. So far as any question of veracity between the two is concerned, we scorn to insult our correspondent by making the slightest observation. So far as the nationality is concerned, we have only to say that our correspondent, whatever his ancestry, knows in the United States but one country and one people, and if he takes the money of the Government it will only be as the scant recompense of arduous service, and not as a douceur and pension for trivial or imaginary hurts.

But, what has Rush Medical College to do with the controversy between the Brigadier and our correspondent? The petty malice which could lug in the low-flung denials and vituperation of the cauterized Brigadier to point an attack on a position in the College, is of a piece with that same brilliant strategy which has led its originators, when defeated before the medical public, to seek to bolster up their tottering fortunes by secret political intrigues and kitchen-cabinet chicane. The same pitiful back-stairs influence in the purlieus of Springfield which has resulted in the profession being un-represented wherever its power should have been felt, breathes all along the lines of the retired Brigadier, nursing a wound which the hot iron of our correspondent did unexpectedly make in his pachydermatous integument.

Honorable medical men should scorn such petty artifices and despicable devices. We notify the Brigadier, and his backers, that the attempt to throw dirt at the Medical College by his pawings and kickings, will prove as futile as his previous attempt to cover his blundering inefficiency under his nationality.

Surgical Instruments. — We are frequently consulted by subscribers in different sections of the country, with reference to facilities in Chicago for procuring surgical instruments of various sorts. Very many wish to procure particular instruments, or to make up cases differing in some respects from the usual ones, or again to have old instruments or cases repaired, replaced or refitted, or new instruments for particular uses. To save ourselves time, and also to communicate what we believe will prove of value to our readers, we here put down that Tolle & Degenhardt, of 130 Clark St., whose advertisement appears regularly in this journal, are a firm who can be fully relied upon in every respect in the premises. They employ none but the most thoroughly competent workmen, and every particle of material is most carefully selected. They use only the finest German steel of Staub, and every blade, or other manufactured article, is fully warranted. We apprehend from our experience in their wares, which has been considerable, that they have little or none returned upon their hands. It is totally unnecessary for surgeons in the North-West to send to the far East for instruments or apparatus, whilst such ingenious and reliable artisans are among us. We heartily commend them and their works to correspondents and readers. With very little noise or attempt at display, they have already built up a business which is not only creditable to themselves, but to our city.

Conservative Surgery.—A correspondent is preparing the details of a case where the wheel of a railroad car loaded with wheat, passed over the ankle of a boy of some dozen years of age, and yet, not only the foot, but the ankle-joint is saved and useful. The accident occurred about a year since in this city.

Rush Medical College.—It is with great gratification that we are enabled to announce that, in the possible contingency of the absence of Prof. Blaney the ensuing session, Prof. E. S. Carr, of the University of Wisconsin, has consented to give the course on Chemistry. The national reputation which Prof. Carr has achieved by his lectures on this branch, whilst

connected with the Medical Colleges of Castleton, Albany and Philadelphia, renders it unnecessary to introduce him to the friends of the College. For profound learning, success as a teacher, brilliancy and eloquence as a lecturer, he is unsurpassed—we had almost written unrivalled. The great demand for qualified medical men now experienced throughout the country, renders the prospects of the College at present peculiarly flattering. We congratulate the coming class that the hiatus caused by the absence of Prof. Blaney is to be so happily filled.

Owing to the absence of Dr. E. Powell, as Surgeon of the first Board of Trade Regiment, it had become necessary again to supply the place of Demonstrator of Anatomy. Students who were present the last session will learn with great satisfaction that I. P. Lynn, M. D., who then filled the position with such marked ability and success, has consented to act in the same capacity the ensuing session. Dr. Lynn demonstrated then his peculiar adaptation to the position, and by his thorough acquaintance with the subject, his energy, zeal and personal qualities contributed largely to the general success of the course. As a general practitioner—as surgeon of a regiment—as Demonstrator in the College, indeed in every responsible position where he has been placed, Dr. L. has invariably gained distinction for himself and reflected honor upon Rush Med. Coll., of which he is an alumnus. We therefore announce the renewed connection with peculiar satisfaction.

Dr. Fisher's Case of Ovariotomy.—A little derangement of our calculations as to the space occupied by matter already gone to press, prevents our noticing in the present issue Dr. Fisher's remarkably successful case of ovariotomy. We shall take occasion to comment upon it the next month. The writer having previously diagnosed the case, and strongly advised the operation, has naturally felt much interest as to the result. It is due to Dr. F. to say that the extraordinary immunity from unpleasant or disastrous sequelæ was largely due to his most constant attention and supervision subsequent to the operation. This is the point of almost supreme importance.

Conservative Medicine.—The attention of all thinking, progressive medical men is requested to the exceedingly able essay, by Prof. Flint, which is commenced in this number of the Journal. Sustaining, as it does, views which for years have been incorporated in our teachings, written and didactic, we hail it as eminently fit to be read and pondered.

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ORIGINAL COMMUNICATIONS.

REPORT OF SURGICAL CASES

TREATED BY DR. GEO. K. AMERMAN,
Attending Surgeon to the Chicago City Hospital.

CASE I.—*Necrosis of the Entire Shaft of Femur—Amputation at Hip Joint—Death on the Seventh Day.*

A. E——, aged 16, born in Germany of healthy parents, was seized about the middle of January with a severe pain in the left knee. Previous to this he had enjoyed good health. This pain made its appearance suddenly, without any cause, and was exceedingly severe. It was soon followed by swelling and active febrile reaction. An intelligent surgeon was consulted, who at once recognized the nature of the difficulty and employed every means to arrest its progress. At a later period, an abscess formed just above the knee, which was opened and discharged a large quantity of pus. Notwithstanding every effort made to arrest the disease it soon became evident that the Femur was seriously affected. The abscess continued to discharge large quantities of unhealthy pus; the pain only partially subsided, and the febrile action continued, though less active. Three months after the first attack, I was called in consultation with his attending surgeon, Dr. Messler.

At this time the limb presented a very serious appearance. The leg and foot were œdematous and rotated inward so that the foot rested entirely on its inner side, the toes pointing toward the right instep. Commencing at the knee and extending upwards to within three inches of the Hip Joint, the limb was immensely swollen, and marked over the surface with large tortuous veins. One large senius existed at the inner and lower end of the thigh. The swelling terminated abruptly above and below, and presented an appearance exactly similar to malignant disease. Hectic fever every afternoon; diarrhœa, night sweats, tympanitis, anorrexia and emaciation were all present.

The only treatment that seemed to offer any prospect of relief was the removal of the limb, and although the chances of such an operation were extremely small, the patient readily assented and desired it.

There were present Drs. Hoffman, Messler, Smith, Heydock and Ross, who, together with myself, thought best to perform the Antero-Posterior flap operation high up, above the tumor, and if the bone was found healthy not to interfere with the joint. The operation was performed in the usual way, the patient being under the influence of chloroform. On sawing through the femur it was found enlarged, softened, and filled with a red grumous material, easily broken down under the probe and partially denuded. Under these circumstances it was thought best to remove the remainder of the shaft and head. This was accomplished by making one straight incision from the angle of union of the flaps on the outer side along the middle length of the bone and extending as high as the upper border of the acetabulum, severing the attachments of the muscles and ligaments and turning the head of the bone out of the socket. Dr. Hoffman compressed the femoral and controlled the hemorrhage so perfectly that not over six ounces of blood was lost during the operation. Dr. Messler took charge of the case after the operation, and from his report I learn that everything progressed favorably

for five days, but on the sixth day he began to sink and died the next day from exhaustion. It is proper to remark that the surroundings of this patient were of the most unfavorable character. Beef tea, brandy, and constant care were not to be had, else, possibly, the result might have been different. On examining the limb, after removal, the disease was found to extend throughout the entire length of the femur. The lower end was fractured transversely just above the condyles, and what remained of the lower fragment was loosely adherent to the head of the tibia and overlying the lower end of the upper fragment. The remainder of the shaft was denuded, rough, and perforated in several places. New bone material had been poured out in the shape of long slender spicula supporting each other and forming a kind of bridge, extending from the shaft of the old bone to the head of the tibia, thus binding the two together.

The points of interest in connection with the above case are few and simple: First, we notice the absence of any cause. Constitutionally, the patient seemed in no way predisposed to necrosis. He had no appearance of a scrofulous or syphilitic taint, and had always enjoyed excellent health. No local cause, so far as we could ascertain, produced it. In the second place, it will be observed that the disease pursued an unusually rapid course. In three months after its first appearance the entire shaft of the femur, the longest bone in the body, was necrosed. And again, the *extent* of the disease. The shaft, both extremities, and the whole thickness of the bone were affected. When necrosis affects the long bones it is generally confined to one of the extremities, or to a portion of the shaft, but in this case we had the bone *entire* affected, without any apparent cause, and terminating in its complete destruction in three months.

Case II.—*Amputation of Thigh—Secondary Hemorrhage on the Ninth Day Controlled by Pressure and Position—Recovery.*

J. H——, aged twenty-five, in good health, with no predis-

position to disease, was injured by a railroad car on Tuesday, June 20th. He received the injury in the morning and was immediately taken to the City Hospital. I saw him in the early part of the afternoon, and found, on examination, a compound comminuted Fracture of the right Tibia and Fibula, with some contusion of the soft parts, and probable laceration of the Ant. Tibial Artery. The right leg and foot were cold, livid, and pulseless. Reaction was well established, and everything seemed to require and render favorable an immediate amputation. The patient was placed under the influence of chloroform and the limb removed in lower third of thigh by the ordinary flap method. Simple dressings, with constant irrigation of cold water, was used for four days. On the fifth day, the stump was redressed and presented every appearance of a favorable union. On the ninth day, whilst the patient and his attendant were asleep, secondary hemorrhage occurred, and he lost nearly a quart of blood before it was discovered. As soon as discovered, compression was made over the femoral, which entirely controlled it. I saw him about one hour afterwards. He was blanched and pale; pulse 120, and weak. Ordered brandy and opium, and as soon as he got over the excitement and fright occasioned by so unexpected and rapid loss of blood, proceeded to remove the dressings. The dressings and blood clots were all carefully removed, the stump washed in cold water, and elevated. There was no recurrence of the hemorrhage, though the pressure from the femoral was removed. From this time forward the case progressed favorably and the patient was discharged cured August 29, ten weeks after the amputation.

There is nothing in the treatment of the above case worthy of notice; but the favorable termination of a case of *primary* amputation *of the Thigh* for *railroad* injury renders it of considerable interest and importance. It is said, that not a single case of primary amputation of the thigh, after one of the late battles, recovered, and this coincides with my own experience of the operation performed for railroad injuries. The causes

of this large fatality have often been discussed, and much information elicited, but none satisfactorily explained. Another point of some interest in connection with the above case, is the occurrence of secondary hemorrhage. This is among the most frequent secondary accidents after amputations of the thigh, and perhaps one of the most annoying, if not serious. I have had two cases during the last year. Both were in amputations of the thigh and both were permanently arrested by pressure and position. I should expect in every case to succeed by these means alone. The pressure must be made by the fingers of an assistant, who is to keep constant watch over the patient day and night, until all danger from this source has passed away.

CAMP DOUGLAS.

One of the first questions asked a patient, "How long have you been sick?" generally gives the answer, "ever since I was taken prisoner." "What is the matter?" "Diarrhœa." There is nothing which so effectually takes the self-satisfaction out of a physician as treating chronic diarrhœa. Add to its usual obstinacy the necessary lack of suitable food, and the stolid indifference of men accustomed to sufferings, and our diarrhœas become the rightful recipients of their usual appellation, the camp curse. The prevalence of diarrhœas among the rebel prisoners is absolutely astonishing. In one of my wards, I one day found that nineteen out of twenty then in the ward had diarrhœa. I have never tested it before or since, but presume it would vary but little among the sick in the hospitals. As to its treatment, my own experience gives me little to offer in the chronic cases, while the acute ones yield readily to opiates combined with astringents. Occasionally I have used mercurials with very marked good effect, and also in others quinine has been producive of excellent results. I have

used the following in some of my cases with much satisfaction: ℞—Pulv. Opi, ʒj; Pulv. Alum, ʒij. M—Make 20 powders; give one every two or four hours until bowels check.

In the chronic cases, there seemed but little encouragement to close the portals of their exit. No wonder Surgeons kept from active field service, clamor to quit the business, for I think if anything could effectually dry up the last spark of a man's ambition, hope and resolution, it would be to dole out daily remedies for chronic diarrhœa. The incessant "no better" sounds mockery to your science. The long list of specifics fade out quietly before your trials, but like few reliable institutions, they still run themselves. I have tried nothing that I could add to, or place in the specific column. I think if I ventured to believe anything had done any good, it was the formula given above. In some cases, I combined Tinct. of Cantharides with my ordinary diarrhœa formula, and it seemed to do good for a while, but soon fell into the useless brigade.

I used Iron to no purpose. In fact I ransacked the list, with as little satisfaction as tho' I had tried Elecumfundletop. It always sounds impious to me for a man to speak of toying familiarly with this disease. He is aping God.

The degree of emaciation is incredible. In many it would seem to be no difficult matter to teach osteology, and they turn the skeleton for you.

In most of the cases, towards their termination, ulceration of the lower section of the cornea takes place, and it has always in this as well as other diseases, preluded a fatal termination. It seems to be the point in the nutrient barometer, to which, if nature sink, there is no remedy.

These cases, notwithstanding the irritability of the bowels, must not be deprived of a liberal supply of hearty food.

In many cases, articles which would seem entirely inconsistent with the disease, were tolerated with wonderful comfort—such as meats, pickles, vegetables, etc.

The denial of a substantial and free supply of food, I am confident, is injurious in the confined cases. Many cases were

post mortemed without eliciting any peculiarity upon which a basis of treatment could be founded.

We have had a class of cases which are new to me, and may be to some of the readers of the JOURNAL.

The first I would see of them, they would be brought into the wards in collapse. Skin cold, shrivelled and blue, difficulty of breathing, great restlessness, the patient tossing himself incessantly from side to side of the bed, almost or entirely pulseless, and every appearance of impending dissolution. Upon inquiry, the patient had been slightly indisposed for a few days, in different ways, probably diarrhœa or chills, and in two cases no such precursors existed—in these they followed drinking copious draughts of ice water. The patient from this was seized with a sense of prostration, and soon the symptoms of collapse as I have enumerated supervened. The first case from its being connected with pretty free diarrhœa and vomiting, I construed into cholera, and used free doses of calomel, camphor, capsicum and opium, and applied mustard almost all over the body, giving whisky freely internally, and saved my patient.

The next cases rather staggered this belief in being unconnected with diarrhœa, and spinal congestion and cerebro-spinal meningitis loomed up. Accordingly, I dry-cupped the spine freely, applied mustard to it and also to the extremities, gave extract of ginger internally, and saved my patient. The balance I have treated in the same way, and saved all of them, some six in number. One of these acted very strangely. He was brought in the ward with seemingly little the matter, his first attack having been, the day before, from drinking freely of ice water—he having fallen senseless out of the door where he was sitting. He was treated in the barracks, and sent to the hospital next day with nothing tangible for trial.

He soon began going about the wards, and during the temporary absence of the nurse, got up and went to a bucket of ice water, and drank his fill. He went back to his bed, and had scarcely got to it when he fell senseless across it. Soon

all evidences of life disappeared, and all supposed him dead, and preparations were being made to carry him out, when some one looking at him discovered a slight throbbing of the carotids, when restoratives, mustard, etc., were applied, and he reacted after a few hours, but did not speak until the following day. From this succeeded a stupidity and typhoid dullness with languid circulation, lasting about a week, from which he slowly recovered. When I saw him the day after his second attack, I blistered his head freely, giving him but little medicine.

Where the exact seat of the disease was, I confess I do not feel free in deciding, but am well satisfied of the nervous seat; but whether of the spinal cord and its membranes, or the organic system, and brought on by the shock in the two cases, by cold applied to the stomach, is to me a mystery. Its malarious origin may be doubted, in the fact of there being no periodicity or tendency to return. Low living could not be assigned as the essential cause, for one of the cases was a cook, who lived well and on the best. Some of them recovered rapidly, whilst others gained very slowly. In these cases vitality was at a very low ebb, for the mustard applied to them always blistered, and in some cases gave rise to very tedious and troublesome ulcers.

Another class of cases which were new to me were parotid abscesses. They usually occurred in patients who had been affected with some active form of disease, occurring upon its subsidence. The patient complained of a deep seated and excruciating pain in the parotid region, with very little swelling for several days; at last the parotid gland seemed almost lifted from its bed, and the distension would be very great, and at the end of a week or more the abscess broke into the ear and discharged freely of a very thick but otherwise natural pus. One I opened externally, but no pus was discharged for many days; at last, however, it discharged externally, but not until it had broken into the ear. The surface in this case sloughed around the opening. I cauterized it freely and it

seemed to be doing well, but he sank and died. Of four or five cases I remember, but a single one recovered, notwithstanding the most vigorous, sustaining treatment, including tonics, stimulants, broths, etc. It evidently did not cause death by the profusion of the discharge, for, with one exception, it was not very great, but only marked a foregone degree of debility. I regret I had no opportunity of ascertaining the exact point of suppuration, or the reason of its *exitus* in the external ear.

Jaundice has occurred quite frequently, but there has seemed to be no treatment that affected it, to any marked extent, and my cases have done well with no treatment.

Many cases, from their condition of inanition, I am sure labor under softening of the brain and spinal cord. The patients seem affected with few tangible symptoms, except a low or partial delirium, when their attention is arrested conversing sensibly, pulse natural, or perhaps weaker or more irritable; no fever, or thirst; tongue natural, except pale; an indifferent appetite; bowels natural or slightly looser; skin pale or dusky bronze; and in this condition they would lie for from three to four weeks and gradually sink. Many cases in my care, and also in other wards, died very suddenly and unexpectedly; which may be accounted for by these conditions: Patients who were suffering under no violent forms of disease and whose cases gave no anxiety, from the gravity of the symptoms, would surprise by their sudden demise.

Pneumonia gave me new confidence in Tart of Antimony. We are very apt to allow our fears to get the better of our judgment, and in assuming charge of as frail, forlorn and vitiated a set of bodies as belong to the camp rebels antiphlogistics took to themselves wings. But, from a careful venture, soon rested securely with Tartar Emetic as my sheet anchor in Pneumonia. Occasionally we were out of medicines, and in one of these emergencies, I ventured on the following useful, if not elegant prescription: ℞. Vin. Antim ʒjss; Tr. Opii ʒss. M. Give thirty drops every two hours.

This venture, brought out by the necessity, formed the basis of my practice, and I have lost but two cases since its use. I sometimes vary it by substituting Morphia for the Laudanum.* We were but poorly gratified when we found Dysentery making its appearance. It seemed with our patients, as a class, it must make sad havoc. But I am gratified to say that I have been very agreeably disappointed. Many of these cases were very severe, and there seemed but little hope of relief, but nearly all the cases recovered—a very small per cent dying. I give to the following formula the credit: ℞. Ol Ricini; Tr. Opii aa ʒj; Syr. Rhei Av. ʒij; Gum Arabic ʒij. M. Give a tea spoonful after each evacuation, or once in four hours. To this preparation might be added any pleasant carminatives to conceal the taste and render it less disagreeable. If at the end of twenty-four or forty-eight hours a decided change had not taken place in the discharges, being freer and bilious, I gave: ℞. Mass Hydrarg. ℈j; Pulv. Opii ℈ss. M. Make ten Pills. Give one every 12 hours. Very soon the discharges changed, tenderness and tormina ceased, and the patient recovered. Recoveries in this, as most diseases, were slow. The tongue cleaned in flaky patches, and many had the peculiar shaved appearance.

I have charge of the flag hospital, which is made up of two wards or rooms, separated by a simple board partition, and there is one curious fact in this connection which is inexplicable to me, and that is that the mortality in the two wards is as four to one. The number of patients in the two wards differ but little, and the care and attention on the part of the nurses is the same, and I am very sure there is no want of care in any other way as to ventilation, and still four die in ward eight for every one in ward nine. Neither is there any selection of patients; they are sent indiscriminately to either ward wherever a vacancy occurs. The ventilation of the two

* Our correspondent has incidentally found what is about always true, that Tart. Antim. and Morph. are immensely superior to *Verat. Virid et alii*, in the treatment of Pneumonia.—Ed.

are alike. There is only one fact that seems to bear on it, and that is, that south of ward eight there were a number of privy sinks, and as our principal winds were from the southwest the stench from these came directly through this ward. Whether this was sufficient to account for it, with the free circulation of air which was maintained, or whether it was simply a coincidence, I am unable to determine; but sure I am that it was to me a very curious fact.

This difference was not only for a week, by an accidental accumulation of bad cases, but was maintained during my entire service. Many who recovered of slight ailments, remaining as a matter of comfort or convenience for ration day, relapsed and died. So that at last I allowed none to stay longer than when they were able to go to their quarters.

But to-day the last of our rebel prisoners leave for Vicksburg, and I am detailed to accompany our escort of troops; so that should I not take a conic section into my head, you may hear from me again in Dixie. R**

MALINGERING.

By TOM O. EDWARDS, M. D., Chicago.

The external, invisible signs of internal and invisible diseases, are in many instances embarrassing. The various neuroses have but few symptoms; not referable to the sufferings of the patients, and in most instances we are compelled to rely on verbal communications. In order correctly to treat disease, we must be familiar with its locality and the complaints of suffering organs, as symptoms are sometimes styled; must be observed with care, and interpreted with accuracy. The introduction of physical signs in the treatment of the diseases of the respiratory organs and heart; has measurably removed the doubts and obscurities so long presenting themselves to the profession. We are now enabled to detect the progress and extent of disease in the chest, and correctly to

mark its limits and define its character. The phenomena of diseases of the brain and nervous system are more intricate and perplexing; whilst the cavity of the abdomen can with great readiness be explored. Yet, with all our advances in improvement, we are frequently in doubt, not so much so as location; but often as to the *character* of the implication, and the practitioner is frequently compelled to feel his way carefully and await new developments, before a diagnosis can safely be made. No part of the profession is more embarrassing than that which imposes upon a practitioner the decision between *real* and *feigned* diseases. The motives of human action are so various and conflicting, the resorts of the vicious and artful are so numerous as to escape the acumen of ordinary observers, and even sometimes to elude the most astute. Our skill and closest observation will be taxed between real and assumed diseases. The wisest men have been imposed upon, and the most rigid examinations have resulted in false prognosis. Surgeons of the army and navy posts, open to all and alike honorable, often have their qualifications taxed and their judgment tested in the examination of persons in service, whose maladies if real would justify their honorable dismissal and a pension for life. In the every day routine of practice in private life we will need be advised there are assumed diseases; and in the frequency of crime and the present reference of all questions, involving moral torpitude to the medical profession by our courts, we will see the necessity of guarding opinions and correctly basing them, in order to protect individuals and guard the community. To stand, as it were, between the living and the dead; to protect the maniac from the scaffold or to rob it of its just deserts, is both the glory and shame of our profession. The plea of insanity, now so much resorted to, gives us a manifestation not only of the humanity and justice of the times, but indicates a diffusion of knowledge creditable to mankind traceable to our profession. Disdaining the dull scholastic restraints of the ancients, medical writers of the present century, have thrown

broadcast before the community, in popular language, facts that have edified and elevated the masses. A spark has flown from our atlas that has illuminated the world, and many causes of human action, on which the mind has heretofore dwelt with horror when comtemplating their results, are now traced to disease; and asylums, instead of prisons; kind medical treatment, instead of scaffolds; are the present curative means for disturbed and diseased moral and mental manifestations. That many are saved whose punishment would have vindicated the justice of severe penalties, none deny; but that any should be punished whose moral condition at the time of the commission of crime rendered them incapable to discriminate between good or evil, all condemn. Better ninety and nine guilty escape, than one diseased, but honest man, suffer. My purpose is to present some of the forms of feigned diseases most commonly found and to give the most reliable means of discrimination. In the army men who feign sickness are called Malingerers; in the the navy, Skulkers; and to such perfection have they brought their science and tact that the oldest army and navy surgeons have been deceived, and dismissions have been granted men whose term of service had not expired, and pensions granted those whose only merit was the possession of a tact sufficient to deceive.

Those who most frequently feign sickness are soldiers or sailors, but Malingering is not entirely confined to that class. The mendicant, to avoid labor; the poor, to obtain public charity, or to impose on private benevolence; some to defraud beneficial societies; others to obtain compensation for pretended injuries, and a large class of persons to avert punishment feign illness. We cannot pass our streets without meeting some person looking for charity; many of these are unfortunate and for these our public institutions have ample accommodations; yet there are others whose lives have been devoted to deception and whose grounds of charity are assumed illness or misspent lives. During the period of the desolat-

ing wars of Europe, when that scourge of mankind, Napoleon, carried desolation and terror into every house by his conscription, the art of Malingering was brought to great perfection. Fœdere says "that it was as difficult then to detect a feigned disease as it was to cure a real one." Happily for us no such necessity has existed, and under our wise and just Government no man, except in the preservation of the public peace or the defence of the Republic, can be forced to bear arms. He who enters the army here does so voluntarily and if his courage should fail him or his enthusiasm expire before his time of service, he has the consciousness that three years will soon expire and that subsequent enlistment will be voluntary. To this fact are we indebted to the comparatively few cases of Malingering, when compared with European severity. Two men are now in this city who imposed on the army surgeons in Germany, and obtained discharges in a way amazing and skillful, and whose departure to America followed these discharges so rapidly as to avoid detection. I know an American soldier who was enlisted and discharged three times, during the last war, and who so successfully imposed on the surgeons as to obtain a pension, which he now enjoys. He feigned hæmorrhage from the lungs, by wounding his throat and gums.

As we have before stated, the motives for feigning sickness are numerous. The soldier, to avoid a battle or duty; the hope of gain induces others; and many cases of suits for malpractice on this ground. The records of courts show many cases against surgeons and physicians for the mismanagement of surgical and other cases, and a few are assumed for the purpose of extortion. There are others who deserve our sympathy, who, in order to elicit kindness and attention, feign illness, and by long confinement and habit become ill.

Dr. Copeland, in his dictionary, has classified the various manifestations of these deceptions, and has thus rendered them appreciable and readily understood. He gives four classes: 1st. Pretended or simulated—the person being in a state of

health; 2nd. Artificially excited—disorder being actually induced; 3d. Exaggerated—in the description and appearance the patient being indisposed; 4th. Artificially and intentionally increased or exaggerated during its course. In these four modes diseases may be said to be feigned or simulated.

Upon a correct opinion of a medical man, mayrest, not only his reputation, but the interests of humanity, and the pride of character which all should possess who are fairly in the profession, should stimulate us in the acquisition of knowledge for the detection of imposture; and as the diseases feigned are almost as numerous as the real and substantial suffering "to which flesh is heir," we must commence in a classified list and thus relieve ourselves from the embarrassment incidental to detail. The most satisfactory classification of assumed diseases is, 1st, Those obvious to the senses; 2nd, Diseases and defects of a simple kind, not obvious to the senses, but depending upon the description of the impostor; 3d, Those of a more complicated character, consisting of groups of symptoms. It is not my purpose to enumerate all the assumed diseases. This would be but a recital of all known affections —the most commonly resorted to, and those which we most frequently meet in the Army and Navy are increased or diminished size of parts, malformations, ulcers, wounds and superficial inflammations, paralytic affections, spasmodic affections as hysteria and epilepsy.

Travelers in Europe meet in every street in cities mendicants soliciting alms. The humanity of strangers affords a revenue for the support of innumerable lazaroni and street beggars. The Americans are said to be the most liberal in their bounty, and not being accustomed to meet in their walks here such objects of disease, are readily imposed upon. The students and practitioners of medicine in visiting Europe, find almost as many cases of interest in the streets as in the hospitals, and are surprised when informed that a large proportion of them are fictitious or assumed. The most common mode of imposition is the formation of a *tumor* by artificial

means. Nothing strikes the passer-by with more sympathy than a large pendulous tumor, and nothing is more readily made. Air can be passed by puncturing the skin, and by a small blow pipe the cellular tissue is inflated. Confine this in proper bounds, the air will remain until absorbed or eliminated through the skin. The butchers in our markets resort to this. The melinguer also resorts to this process to produce ascetis or hydrocele, or hydrocephalus, also similated hernia. It is no easy matter, without carefully handling the parts, to discriminate between the feigned diseases mentioned and the real. We obtain aid by uncovering the tumor, and from its inelastic and soft feeling can adjudge the difference. An infallible sign of imposition is the puncture contiguous, and in every case covered by *adhesive plaster*. The transmissibility of lighter genuine hydrocele would also exist in these cases. The gravity af the tumor would aid the diagnosis, but a puncture carefully covered by an adhesive plaster, would be the best additional testimony of the imposture. A case of assumed hydrocephalus was recently detailed to me by a surgeon of Cincinnati. The mother was a German, and desired to impose on a public charity. She was successful, and the child recovering so rapidly from a disease which ordinarily terminates in death, or under the most skillful treatment is protracted, induced an examination and the puncture was found. His mortification at the deception was very great. The foreign army journals are filled with deceptions not found in private life, such as swallowing quantities of chalk and vinegar, to eliminate the carbonic acid gas, producing tympanitis and dropsies of the upper and lower extremities; are produced by a ligature, or hanging the arm or leg over the back of a chair previously to the hour of the expected visit from the surgeon. The marks of the ligature and pressure are the best means of detecting the fraud. The tympanitis artificially induced is easily removed by numerous doses of glauber salts and tobacco. The patient seldom repeats the fraud after this drenching. Swelling of the joints is induced by rubbing the skin with acrid

plants, as the ranunculus acris. This merely thickens the skin and the thickened condition will detect the imposture.

Dr. Hector Gavin, in a work on feigned diseases, gives many amusing cases of frauds, such as the attempted production of a tumor in the abdomen by forcibly elevating the spine whilst lying on the back; the production of a polypus in the nose by the use of the testes of a cock, or the kidney of a rabbit impregnated with fœtid juices. Prolapsus ani has been imitated by the gut of an ox or sheep, or by the everted annal extremity of a cat or hog; and cancer, in one case, by the use of the spleen of a cow and a sponge under the arm pit, moistened with milk; and it is not uncommon for females to practice the deception of simulating pregnancy by the use of a pad. This scheme is sometimes successful on the parties on whom the fraud is practised, rendered susceptible by the consciousness of guilt. The eye and touch will most readily expose the above named deception.

Feigned diseases of the joints are not so readily detected. *Anchylosis* is occasonally resorted to, in order to recover from physicians, in suits for malpractice, or to obtain release from the army. A case of this description came under my observation during the session of the 30th Congress. Hon. Charles Brown, the representative from Philadelphia, asked me to examine a German, who was importuning him for redress against the decision of a court martial. The soldier told a long and plaintive story of a series of outrages perpetrated upon him. His head had been shaved, he stood guard four hours a day for four days; three months pay was withheld, and he was drummed out of camp, on a charge and conviction of malingering, or feigning an anchylosed knee. He came to Washington to obtain from the Surgeon General a re-examination when that was denied, he presented himself before the Committee on Invalid Pensions. A portion of the committee, touched by the man's sufferings and condition, was disposed to report a bill in his favor; the remainder desired further examination, and I examined the man. His countenance indi-

cated suffering, and he had so schooled himself as to cry almost equal to nature. The limb was equal in length with its fellow; but the thigh of the injured limb was one inch and a quarter less, and the calf one inch less in diameter than the healthy limb. It was permanently extended, and resisted all the force I was able or willing to employ in flexing it. On visiting the war department, Dr. Lawson, Surgeon General, put into my hands the papers and testimony of the trial. The man belonged to Capt. Sherman's company of flying artillery; had been in service two years; bore a good character, and was an efficient soldier. He alledged, about one week before the battle of Buena Vista, that while on parade, he was kicked by a horse one inch below the patella, and presenting himself at the hospital, was admitted. The testimony of four surgeons assert, that on his admission, they could discover neither dislocation, nor wound of the skin in or near the seat of the injury; nor was there either heat swelling or redness in the knee-joint. He was ordered to bed, and linaments directed to relieve pain complained of in the joint. The stirring events of the times, the battle so famous in the history of the last war, and the numerous engagements with the sick and wounded, diverted the attention of the Surgeons from the case for more than a month; the man remaining all this time in hospital. Subsequently, means were used to restore the alledged loss of motion in the joint. Blisters, iodine ointment, and frictions were resorted to without avail, and the soldier became importunate for a discharge and a *pension*. These means occupied about four months, and his condition was not improved. One of the Surgeons had occasion to visit the hospital late at night, and was surprised to find the limb *flexed*. He communicated this fact to his colleagues, and a variety of tests were then instituted, which resulted in a complaint of malingering, a trial by court martial, and the punishment already stated. It was ascertained that he had served in Europe; but no fact further than the service was elicited. The means resorted to by the Surgeons to detect the fraud were ingenious. A double in-

clined plane, similar to Bell's fracture box, was firmly bandaged on the thigh, a pillow placed under it, but no support to the leg, and the joint of the instrument at the knee was loose. During the hours of wakefulness, or the presence of the Surgeons, the patient kept the limb extended; but the watches frequently found him resting the heel on the bed, and during sleep *invariably* found the limb flexed. When aroused the soldier would instantly restore it to the extended position and the power of four men could not flex it. The facts were clearly proved and the court directed the sentence already named, and it was fully executed. The Surgeon General alledged he had no authority to revoke the sentence, and the Committee of Congress would not act unless there was some testimony, fully proving a mistake. On my way from the War Department, and revolving this matter in my mind, I met Dr. W. T. G. Morton, of Boston, so famous as the discoverer of the anesthetic property of Ether, and enquired of him if he had ever applied or heard of the use of Ether in detecting a supposed Malingering. He had not used it, but did not doubt, if there was deception, it could be readily detected by these means. I wrote Dr. Lawson and Mr. Brown, and desired the man to submit to the inhalation, and that I would be present with Dr. Morton to witness the exhibition. The soldier was advised, but refused to submit. The case was dropped in committee, and he was denied access to the Surgeon General for a week, when he agreed to submit. Dr. Morton, with his usual success, induced the full impression of the Ether, notwithstanding the soldier's utmost efforts at resistance. When fully under the influence of Ether, the limb was easily flexed, and the fraud most fully proved in the presence of twenty intelligent surgeons and others. The consternation and mortification of the German, on awakening, to find his limb flexed and the failure of a system of fraud and deception, practiced for more than two years, can be imagined, but not described. This is the first case of the kind in which anasthetic agents were applied, and its complete success renders them our most efficient agents.

In the 3rd Regt., Iowa vols., a private, from a fracture of the patella, (incautiously prognosed by the surgeon,) that he would never be fit for service, attempted for a month the same fraud and was detected by the splint on the thigh, similar to the means described in the foregoing case. He was restored to the ranks and his anchylosis vanished upon a threat of a court martial. In every case of malpractice in which contracted or stiffened joints are the causes of the suits, the use of Chloroform or Ether will most effectually aid the diagnosis.

Curvatures of the spine are sometimes feigned. We always find in these cases the curvature in the dorso-lumbar region, the curve always single; the convex side free from tumefaction or swelling; two folds of the skin on the concave side and the hip raised, and the leg of that side shortened. In diseased conditions there is more than *one* curvature; the convex side is tumefied or gibbous; the seat of curvature variable; there are *no folds* of the skin on the concave side; the trunk has little or no inclination, and but slight elevation of the haunch. In cases of this kind the Ether or Chloroform would unmask the deception fully, independent of the distinct differences pointed out. By long continued bandages and flexion, contraction of the neck, shoulders, limbs and joints have been induced or feigned. These contractives are generally attributed to injuries such as wounds or burns. The absence of scars would create suspicion, and the fullness and firmness of the contracted muscles would confirm it. The means most useful in detection would be a tournaquet on the nerves supplying the contracted limb, applying wet bandages tightly around the limb, which, on drying, so press the muscles as to prevent the contraction; giving emetics or intoxicating, and during the consequent relaxation, moving the limb; suddenly moving the limb when the attention of the patient was engaged, or by applying weights or pullies. The latter expedient is dangerous, as adhesions may have taken place and their rupture may be injurious. The will has been schooled and the muscles trained by use; to bear immense

weights; by etherization we overcome the resistance of the muscles and suspend the will. The actual cautery is frequently resorted to to cure real *Coxalgia*, and several cases are reported of *instantaneous* cure. These are feigned, and the patients, dreading a repitition, have ceased their imposition. A constant patient in Commercial Hospital, an Irishman, after spending the summer in a Cholera Hospital, desired a winter's residence for Lumbago. His general health was good. After free scurification and cups, the red-hot iron was ordered in two days if not better. He left before the time, and has never returned, alleging "he was not going to be burnt for a pain in his back."

Dislocations are sometimes feigned. I know an individual who can subluxate his shoulder-joint at will. It resulted from a full luxuration and a laceration of the ligaments. He is something of a wag and has tested the surgical skill of a number of physicians in its reduction and has accustomed himself to bear much traction, and after an acknowledged failure on the part of the surgeon, mortifies and surprizes him by reducing it himself.

Wounds, ulcers, and inflammations of various kinds, are similated by soldiers and paupers. They are difficult to discriminate from the genuine diseases. In countries requiring long and severe military service, such as in Egypt, it is said by travelers, it is difficult to meet with a grown man unmutilated, or feignedly so. Ulcers are frequently artificially induced, and when thus are kept up by irritants. Many patients in our benevolent institutions prefer a residence there to the precarious subsistance of ill-directed labor, or lives of indolence; and thwart the labors of surgeons by use of irritants, or violate directions by assuming positions injurious to their wounds. In these cases, confinement to bed by ordering the nurse to lock up their clothes, and having an attendant to dress the wounds, will frequently expose the fraud; or confining the limb in a tight box, inaccessible to his arts, will surely cure.

Army Surgeons meet a variety of cutaneous diseases similated by soldiers, such as lupus, by pounded garlic or euphorbia; erysipelas, by the short application of blisters, and small pox in its eruptive stages, by punctures, into which bay salt and gunpowder are rubbed. These impositions seldom occur in private practice. Persons from habit acquire the power to vomit at will, and it is a fictitious symtom in disease. It can be induced by swallowing air and by a strong and sudden effort of the abdominal muscles; no inflammation following, and no concomitant symptoms would justify investigation for fraud. I knew a female who, either from habit or the use of nauseants, acquired the power to vomit at pleasure, and was several times ill from inflammation of the stomach thus induced. My candor in informing the husband of the origin of the malady, lost me the practice of the family. The habit was continued until thickening of the mucous membrane resulted, and before her death she confessed the fraud. It was to receive the sympathy of friends and to avoid labor. As we have before observed, almost all diseases are assumed, but those which most decidedly impress the friends or excite most fully the sympathy of physicians, are generally selected. *Hæmoptesis* is a favorite. This is produced by incising or puncturing the gums and throat, or by retaining in the mouth various lozenges, colored with carmine or vermillion. *Hæmaturia* is similated by swallowing beets-madder or cochneal and blood injected into the bladder or obtained from the urethra by wounding and various alledged urinary concretions, found to consist of sand, quartz, flint and glass, have been seen to pass with the urine. One of the most remarkable of these cases is recorded in the *American Journal of Medical Science*, 14th vol., page 91, by Dr. Caleb Ticknor: Miss P., of Massachusetts, had been bed ridden for some twenty years, in consequence of an accident received when eleven years of age, by a barrel falling across her loins. She suffered for a considerable time pain in various parts of the body, as the loins, stomach and bowels, and finally lost the use of her

limbs. When Dr. Ticknor was first called in consultation she was laboring under a severe diarrhœa, and pretended that food taken would pass the bowels in ten minutes after swallowing, without having undergone any change in smell or color. From this time she pretended to have gone one hundred and nine days without any evacuation from the bowels. After this she is reported to have vomited the contents of an enema in a few minutes after it was administered, without any admixture of fœces. During the one hundred and nine days, she is said to have vomited regularly every day, the food, properly digested, which she had taken during the preceeding twenty-four hours, and with this, as well as the urine, *sand* was intermized. The bowels now resumed their office and the urine was vomited. On trying to pass a catheter a hard substance was found in urethra, blocking up the passage. Occasionally, it is said, the urine was passed per rectum, mingled with sand, and at length after the urine began to flow through the natural passage lumps of concrete sand were discharged with it. Finally an abscess is said to have formed in the side, from which escaped sand, pus and fœces. These phenomena are said to have recurred for several weeks together, until at length the patient insisted she had no fœcal or other evacuation from the stomach for forty days, except urine, while she occasionally vomited, together with injections, fifteen minutes after they had been administered, but without any appearance of fœces. The tongue was black as ink, except the edges, which were red. She complained of excessive pain in the right side and stomach; said she could feel lumps of sand moving about inside; sand continued to pass from the side, mixed with blood and fœces and sometimes milk, and she pretended to have spasms about the throat and mouth. Dr. T. states he could not succeed in passing a probe into the orifice of the abscess, but he could feel the sand inside. One day she pretended to have passed from the bowels forty-four lumps of sand, at one sitting, varying in size from a pea to a walnut, and vomiting of fœces and urine seems to have been

a common occurrence for months together, although her jaws were firmly set. Blood is also said to have flown from her mouth, ears and nose, commingled freely with sand, and her mouth is said to have been filled with sand for eleven consecutive days. Dr. Ticknor says he saw her vomit a gill of urine, perfectly transparent, and also a teaspoonful of fluid discharged from the ear with sand, and a lump of sand from the nose. On the 1st of August, he states, she voided by stool a tablespoonful of sand with a tin cup full of pus; also a membrane-like substance of the size of a crown piece containing *fine delicate hairs*, together with sand and urine from the mouth, rectum, urethra, nose, ear, side umbillicus. A month after this we find her still vomiting urine and affected with spasms, resembling epilepsy, with the left leg strongly flexed upon the thigh, and the heel drawn up and resting on the gluteii muscles for twelve days together. From the 20th of July to the 20th of September, she claimed to have no natural evacuation from the bowels or bladder, but had vomited the contents of both. A year after, Dr. T., on visiting her, received the following account from her sister: "That her bowels become regular soon after his last visit and continued so for some time, when she again vomited their contents; appetite generally good; left leg during the whole time continued flexed, and attempts to straighten it occasioned frightful spasms; had rode out frequently; had done a good deal of needle work, and enjoyed comparatively good health." A portion of the sand was analyzed and was found to be composed of silix and lime, mixed with a few short hairs, precisely resembling the mortar from a dwelling. I consider this one of the most remarkable instances on record, as the patient continued for many months to impose on all the physicians who visited her, amounting to at least a dozen. In commenting on the case, Dr. T. admits that she might have practiced a deception, but that such a supposition was hardly probable, inasmuch as she sustained a character for genuine piety, and as she and her two maiden sisters enjoyed a competency, there

was no motive for them to deceive. The Dr., at the close of his narrative, says, "the patient is living about fifteen miles from where my brother is now practicing, and he may yet detect her in her imposture, if she is not put upon her guard by publishing speculations prematurely." That a number of physicians were imposed upon by this woman is apparent from the belief in the occurrence of these phenomena. A bare recital of the facts would be sufficient to convince the most casual observer of the fraud practiced. The sisters were accessory, for to believe that this fraud could exist for so long a period without their cognizance, is absurd, and beside *their statements* are mostly received as proof the occurrence. The glass and silex passing her bowels would have been sufficient to detect her. The statements of the Dr. in relation to the circumstances of the family were found to be erroneous, and gain was the inducement. A similar instance occurred in Maryland, in which there was no pecuniary necessity or desire, but can only be accounted for on the ground of moral insanity.

The conduct of those alledging themselves to be under the influence of witchcraft, as exhibited in the early settlement of this country, are examples of feigned sickness, and may be traced to every motive that could possibly operate upon mankind. Fear, malice, gain, and moral insanity, will account in every case, for the outrages there committed by witnesses, and these can only account for the most singular conduct of persons whose intelligence and position would indicate a better state of affairs. Bancroft gives many scenes in his history of these times, and were it not that the mind is horrified with the injustice done innocent persons, and staggered at the credulity of men of acknowledged character and intelligence, they would afford a cabinet of Momus. The bewitched person in one case pretended to be dumb. "Who hinders these persons from giving testimony?" "I suppose the devil," answered the accused. "How comes the devil," retorted the Chief Judge, "so loathe to have any testimony brought

against you ?"—a rejoinder pointed, and looking with great power to the supposed facts of the case.

No man in society but that may innocently become the subject of malicious prosecution. A clergyman, hearing his wife and domestic disputing in the kitchen, about some trivial matter, went down and only interfered so far as to repel some rudeness offered by the girl to her mistress, by pushing the girl one side. She either accidentally or purposely fell against the dresser and received a slight wound over the eye, of no sort of consequence. She immediately went up stairs, stood at the street door, told the people passing by; that she had almost been murdered by her master, and to confirm this statement dropped into an apparent epileptic fit. She was then taken as one expiring to a hospital, and without further enquiry the unfortunate clergyman and wife were dragged to Newgate. The indignation of the populace was so great that the windows were broken and the furniture in his house was mutilated and thrown into the streets. In the evening the account of this dreadful murder was cried through the streets by the newsboys. The next day the patient was removed from the hospital to private quarters, where she was attended by the faculty for ten or twelve days, during which time she never exhibited the least sign of sense or memory, but seemed to be (particularly when examined) violently agitated and convulsed. Prof. Sam'l Cooper was called in consultation, and on examining her carefully was rather surprized to find the case one of Malingering. In this connection one of two purposes presents itself: either to alarm the patient by the fear of an operation, or to arouse her into a sudden passion by abuse. The Dr. took the latter method, threatened to send her to prison for the imposture. She become as one "electrified, bounded from her coma, and *swore he dare not.*" The girl immediately decamped, the clergyman and wife were released, and the physicians in attendance were taught a lesson in *diagnosis* that lasted them to their last moments. The terror and shame of the clergyman was so great as to jeopard

his life, and he recovered after a long illness with impaired health, standing and fortune.

A gentleman of my acquaintance, of some celebrity as a surgeon, was called to see a negro man, found in a barn on Sunday night, bleeding from the nose and mouth, and in most perfect coma. The signs of cerebral pressure were very manifest, and a bruise on the head seemed to indicate fracture with depression. The head was carefully shavred and the trephine prepared for the elevation of the supposed depressed bone. The incision was made through the tumefied scalp and the bone exposed, when a student present thought he perceived the odor of rum in the breath of the patient. The stimulus of the knife had somewhat aroused him and a few words in an under tone obtained the confession of facts that suspended any further progress in the operation. The head was carefully bandaged; cold cloths applied; a fee of fifty dollars charged for the operation—the master of the slave to this day in blissful ignorance of the facts of the case, and the surgeon added an additional leaf to the chaplet, encircling his brow, *i. e.*, one in the estimation of the public. His student, one or two medical friends and himself are the only parties cognizant of the affair, and each of them have added a note in his case book "never to prepare for or begin an operation for injury of the head without previously smelling the patient's breath."

Epilepsy is frequently feigned both in and out of the army, and so artful and persistent are the means employed, as to render the fraud most difficult of detection. No disease in the vast vocabulary has received more medical investigation; none so fully challenges public sympathy. All admit its distinctiveness and mourn the impossibility of relief in many cases. No sensible man now gives the interpretation from its name as a visitation from above. It is assumed, because there are intervals of apparent health in the real disease, and the imposter can suit his convenience in inducing the fit. The real epileptic is oftentimes bruised and injured during the convul-

sion; the feigned resorts to similar means to confirm the impression he desires to make. One sign of the imposition is the frequent recurrence of the patient to his condition—the warning of those around him of the attack, and his constantly making his infirmity the ground of favor or sympathy. The real epileptic will never, unless interrogated, speak of his affliction, and if intelligence be not destroyed; will studiously avoid any conversation upon the subject. Besides, the epileptic is never importunate for medical assistance; the feigned a constant attendant upon physicians, whose money, not remedies, he mostly covets. During epileptic seizure, there is an entire loss of sensibility; the most intense stimulants, such as fire or puncture fail to produce any impression. These are cruel means, and would be justified only when there was strong evidence to ground suspicion that the case was a deception. The safest stimulants are the vapors of ammonia, snuff applied to the nostrils, assafœtida, alcohol to the eye. These fail in real epilepsy, and cases are recorded of the insensibility to these impressions being acquired. Fodere relates a case of a soldier who had acquired such skill in feigning, and such insensibility to stimulants, as to resist the application of all but *fire*. This always restored him, though he lay apparently without sense, his eyes starting from their orbits, and his mouth foaming. He afterwards confessed the deception. This was a violent measure, and should never be resorted to, unless we have the absence of two symptoms ever attendant upon epilepsy—the dilatation of the pupils, their entire insensibility to light, and a natural sleep following each paroxysm. We repose more confidence in these two facts than any combination; indeed we regard them as *sine qua non*. If, after epileptic seizure, a patient should immediately arise and walk, and during the convulsion light contracted the pupil, we have just grounds of suspicion and are fully justifiable in the use of harsh means for their confirmation. The biting of the tongue or the expectoration of blood from wounds of the mouth, the convulsive action and frothing at the mouth may be assumed;

but a dilatable pupil or the sudden recovery and assuming the erect position, with facile locomotion, are never found in genuine epilepsy. A girl was brought to the hospital at Vienna, who had been cured of deafness, which was speedily followed by epilepsy. The fit which did not occur more than once or twice a day before her admission, now recurred every hour. It resembled a real invasion, by the clenched hands and distorted eyes. The surgeons suspected deception, for the following reasons: she did not open her eyes, during a paroxysm, with a wink, but in the natural way; pulse natural; when the curtains were drawn, the pupils were dilated; on opening the eyes the pupil contracted, and when a candle was presented to the eye, the contraction was violent. This convinced the surgeons the disease was assumed, and ordering her to be taken from bed, and kept in an erect posture, with further instructions if she fell to chastise her severely, brought the confession in a day or two. The pupil in this case gave the diagnosis. Another case of a female, confined to prison for murder, who had resisted three severe burnings and had fully convinced her attendants of the realty of her affliction, but betrayed herself by rising immediately after a fit, and walking steadily. The remedy resorted to in Paris and found frequently successful in epilepsy, is placing the patient upon straw and setting fire to the corners. It is said to have succeeded in the hands of the police in many instances of long practised deception. The diagnosis is important, and we repeat it, if the pupil during a paroxysm is insensible to light, if sound sleep follows, and a consciousness of affliction that induces the patient steadily to avoid conversation on the subject, the disease is not assumed. If these are absent, we may with great propriety question the seizure.

Paralysis, and consequently loss of motion and sensibility, are frequently feigned. Partial paralysis is always preferred to general, as it is better assumed. A general history of the case or loss of temperature of the affected part in real disease, will give the grounds of difference. If any doubt exists, a

careful watch and low diet will in time give developements, besides the diet is one of our best therapeutic agents. *Insensibility*, *coma* and *lethargy*, all similar manifestations of severe diseases, are assumed. That so high a degree of tolerance of pain could be assumed, as we have evidence of, is a phenomena alike curious and inexplicable. The most violent irritants are resisted, and one case is related of the scalping of the head and application of the trephine having failed to extract a sign of consciousness. A soldier by the name of Drake assumed entire insensibility and resisted for months every variety of treatment; even the shower bath and electricity made no impression upon him. A proposal to apply the red hot iron was more than he could contemplate, and before the instrument could be prepared, he decamped. However, Phineas Adams, a soldier of the Somerset Militia, was confined in jail for desertion. From the 26th of April to the 5th of July, he laid in a state of insensibility, resisting every remedy, such as thursting snuff up the nostrils, electric shocks and other potential agents. When his limbs were raised, they fell with the leaden weight of inanition. His eyes were closed and his countenance pale; his respiration free, pulse natural. The sustenance he received during this period was eggs and wine, and occasionally tea, which he sucked through the teeth, as all attempts to open the mouth were fruitless. Pins were thrust under his finger nails, to excite sensation, but in vain. It was conjectured the illness was owing to a fall, and a proposal was made to remove the pericranium to ascertain the existence of the depression of the skull. The surgeon described the operation to his patient, at his bedside, and actually removed the scalp and examined the bone. During the operation, no emotion escaped him, and but once, when the trephine was applied, did he manifest any sensibility, and then only by a groan. The life of the man not having been destroyed, nor his health benefited by this dernier resort, he was discharged and sent home; in two days thereafter, was seen sitting at the door, talking; next day, walked two miles, cut spars, carried reeds up a lad-

der, and assisted his father in thatching. This is a remarkable case, and one that startles our credulity; yet the attestants are credible. *Hysteria* is occasionally feigned, and so artfully as to be difficult of detection. If an imposture of this disease be treated with the nauseating draughts usually prescribed by the routinist, or an occasional shower-bath of cold water, a remedy equally profitable in the real in many cases, as in the assumed disease, we either cure the affection, or, what is equally beneficial, induce its being no longer practised. *Syncope* is sometimes feigned, but is readily detected. It is not an uncommon occurrence on the part of young ladies of delicate sensibilities, and although those who really faint always fall, yet these take good care to have some one near, into whose arms they may find a lodgment. Members of Congress have been known to faint at the conclusion of long speeches. It was a common finale, until the sagacious John Randolph, of Roanoke, spoiled all its artistical effects by observing the singularity of the phenomena, that the face of the fainting member continued *red*. On one occasion he said: "Col. ——— made a good speech, but not so good a faint, as his face was too red." The remark gave rise to lengthy correspondence and a threatened duel, but was the means of breaking up the growing evil.

Death has been feigned; in the case of the celebrated Col. Townsend we have a remarkable illustration. We quote a description from Dr. Cheyne: "He told us he had sent for us, to give him some account of an odd sensation he had for some time observed and felt in himself, which was, composing himself, he could die or expire when he pleased, and yet by an effort, or somehow, he could come to life again; which it seems he had sometimes tried before he had sent for us. We all three felt his pulse; it was distinct, though small and thready, and his heart had its usual beatings. He composed himself on his back and lay in a still posture for some time, while I held his right hand; Dr. Baynard laid his hand on his heart, and Mr. Skine held a clean mirror over his mouth,

I found his pulse sinking gradually, till at last I could not feel any, by the most exact and nice touch; Dr. Baynard could not feel the least motion in his heart, nor Mr. Skine discern the least soil of breath on the mirror. Then each of us by turns examined his arm, heart and breath, but could not by the nicest scrutiny discover the least symptom of life in him. This continued about half an hour. As we were going away (thinking him dead) we observed some motion about the body, and upon examination found his pulse gradually returning and motion of his heart; he began to breathe gently and to speak softly. This experiment was made in the morning and he *died* in the evening. On opening the body, nothing was discovered but disease of the kidney, for which he had long been under medical treatment, all the other viscera being perfectly sound. This case is remarkable and instructive; showing states of the system so nearly resembling death as to deceive medical men, and only distinguishable from it by the absence of rigidity and the presence of animal heat. It was a case of voluntary syncope and showed extraordinary influence of the will over the action of the heart. Col. T. is reported even in health to have been enabled to control the action of the heart. I know of no similar case reported.

Should you deem this paper of sufficient importance to give it place in your journal, I will continue the subject under the second head of "Diseases not appreciable to the Senses, but *dependent* upon the description of the Impostor."

SELECTED.

CONSERVATIVE MEDICINE.

By AUSTIN FLINT, M. D.,

Prof. of the Principles and Practice of Medicine in the Bellevue Hospital Medical College, N. Y., and in the Long Island Hospital.

(Concluded from September Number.)

Clinical experience has rendered it doubtful whether the antiphlogistic treatment exerts much effect on the intensity of inflammation, its results, or its duration. Conservatism, therefore, dictates a careful weighing of the evils of the treatment against the chances of its usefulness as regards these objects.

It is not settled by experience that this treatment, carried to a greater or less extent, is always in no measure efficacious. Hence, there is room for difference of opinion, and the practice of different physicians will differ. The discriminating practitioner, who, although satisfied of the evils of the indiscriminate employment of antiphlogistic measures, believes in their ability, if judiciously employed, will be guided, in withholding or resorting to them, by the circumstances belonging to individual cases. And here it is that his practical knowledge, judgment, and tact are brought to bear on the management of inflammatory affections. Conservatism will dictate to such a practitioner not to employ blood-letting, etc., when the inflammatory affection, from its seat and degree of intensity, involves no danger, and when there is reason to suppose that it may pass through its course favorably, without active interference. Conservatism will dictate the same policy when all the local results to be expected from the progress of inflammation have already taken place, and the restorative processes only remain —a condition illustrated by the second stage of pneumonia, when all the exudation that is to occur has occurred, and the recovery involves only the absorption of the morbid deposit. Conservatism will dictate the same line of conduct in all cases of disease in which more danger is to be expected from failure of the powers of life, than from lesions incident to the local affection.

The value of therapeutic agencies is, of course, to be determined by experience. Developments in the progress of pathology, however, contribute to our knowledge of therapeutics,

not only by giving direction to clinical observation, but by harmonizing with the conclusions drawn from the latter. It is interesting to note the consistency of the practical views now generally held as regards antiphlogistic measures, with late developments respecting the origin of certain inflammations. Inflammations not traumatic were formerly considered, and are now often called, spontaneous. We may use this term conventionally as distinguishing a local disease not referable to any obvious local cause, but, strictly, it is an absurdity to say that any disease is spontaneous. Every local affection must involve an adequate morbific agency acting on the part affected. It is true that our present knowledge does not enable us generally to appreciate the nature, sources, and the *modus agendi* of the proximate causes of inflammatory affections, but we have acquired, of late years, some information important in itself as a basis for analogical reasoning. Clinical observation has shown that the accumulation of urea in blood is apt to lead to inflammation of serous structures. This we know, and it is a rational supposition that urea (or the products of its decomposition) induces inflammation, by acting directly on these structures. There are sufficient grounds for believing that the local inflammations occurring in gout and rheumatism are due to the local action of a *matereis morbi* in the blood; perhaps the uric acid in the former, and the lactic acid in the latter of these diseases. Reasoning by analogy, we may expect with considerable confidence that future researches will show the so-called spontaneous inflammations generally to be produced in a similar manner. And with this view of their production, we should rationally expect great results, not so much from the antiphlogistic treatment, as from measures addressed to the morbid conditions of the blood which underlie the local manifestations of disease. To ascertain these morbid conditions in different diseases, to prevent the introduction or accumulation of morbific material in the blood, to neutralize the poisonous properties of this material, by causing the promotion of innocuous combinations, prevent the organico-chemical changes which its presence induces, (catalysis,) or to eliminate it through the emanations of the body —these are the great objects of therapeutics at the present day, which harmonize with the late revelations of pathology. Without stopping to inquire how far these objects have been obtained, it is to be remarked that they are obviously conservative, involving, as they do, protection against internal agencies inimical to life and health.

Conservative medicine thus dictates, in inflammatory affections, proper discrimination in the employment of the so-called antiphlogistic measures, which, if failing to exert a controlling influence, are necessarily hurtful, and, it may be, destructive, by impairing the vital forces. It also dictates the judicious use of remedies addressed to the internal causative conditions pertaining to the blood, so far as our present knowledge extends into these most important provinces of pathology and therapeutics. But this is not all. Conservatism often demands that the vital powers shall be sustained. Sustaining measures of treatment, practically considered, consist of tonics, alcoholic stimulants, and nutritious diet. We will not inquire as to the *rationale* of the operation of these measures. Suffice it to say, clinical experience shows abundantly that they lessen the degree to which the vital forces would otherwise be impaired by disease, and may prevent a fatal termination of disease by exhaustion. I have already admitted that the phrase "powers" or "forces of life" is metaphorical. Life is not an entity. But with a fair understanding that this personification of a combination of conditions, as yet but imperfectly understood, is merely for convenience, it is unobjectionable. The powers or forces of life enable the system to bear up under disease, to resist it successfully, and recover from it. On the other hand, we may say that disease destroys by overcoming the powers of life, whenever death takes place by asthenia or exhaustion. Every sagacious practitioner knows that certain symptoms, no matter with what disease they are associated, denote failure of the vital powers, or inability to resist disease. He estimates the amount of danger by these symptoms, among which those referable to the circulation are especially important. He often bases his prognosis far more on these symptoms than on the nature and extent of the local affection. Every practitioner knows that an inflammation, the same in all respects, so far as the local affection is concerned, in different persons, affects the vital forces differently. Take, for example, pneumonia, extending over the same space, and inducing an equal amount of changes, which physical exploration enables us to determine with accuracy: one patient manifests little disturbance of the system, and no symptoms denoting danger, while another patient will succumb to the disease. Every practitioner knows that some persons, who, in health, present no evidence of a lack of vigor, have very little ability to resist severe disease. They are quickly destroyed by affections which other persons readily endure, and endure, perhaps,

without much inconvenience. Of course, these facts are explicable, but not with our present knowledge, and, until explained, it answers to refer them to differences as regards the vital powers or forces. They are facts of not a little practical importance.

Conservatism dictates sustaining treatment in any inflammatory affection whenever the symptoms denote failure of the vital powers, whether the period be early or late in the course of the affection. This treatment is to be pursued vigorously in proportion to the rapidity of the failure and the amount already taken place. It is important, in all dangerous affections, to watch for the first evidence of failure, and to lose no time in resorting to supporting measures. Such is the influence of traditional ideas, that these measures are frequently delayed from a timidity which experience is sure to remove. It is far wiser to enter on the use of tonics, stimulants, and a nutritious diet to early, or when not required, than to incur risk of delay, or their omission when required. In the one case, the liability of harm is small; but in the latter, lost time, which cannot be regained, may have been of immense importance to the patient. So far from incurring risk of damage from delay, the wise practitioner will anticipate the indications for support, and forestall the failure which he knows would otherwise occur. Physicians, however devoted to the antiphlogistic treatment of inflammations, have generally recognized the importance of supporting measures to "obviate tendency to death." When the flame of life is reduced to a glimmer, they would prevent it, if possible, from going out. Does not common sense teach that measures which may prove serviceable under these circumstances, would have proved much more so when the danger was less imminent? Is it not better policy to endeavor to keep the lamp of life burning brightly, than to depend on efforts to restore the flame when nearly extinguished? In cases involving danger to life, the importance of sustaining treatment is to be measured by these questions: Is the chief danger failure of the vital powers, and how great is the danger from this source? In cases not involving danger to life, the importance of support has reference to the duration of the disease, the rapidity of convalescence, and the condition of the recovery. The advantages derived from the proper application of conservatism, as regards sustaining treatment, in all operations, by no means consist exclusively in a reduced state of mortality, but also in a speedy and

rapid convalescence, and in the completeness of the restoration to health.

These remarks have had reference more especially to acute inflammations. Chronic inflammation affecting an important part may continue for a greater or less period, and recovery finally be complete; but during its continuance the powers of life are more or less impaired. It may destroy life by leading to incurable lesions, or by its protracted duration; in either case death usually taking place by slow asthenia. Under all circumstances, the affection is less likely to be prolonged, serious changes of structure are less likely to take place, and a fatal termination is postponed in proportion as the vital powers are preserved. Conservatism, therefore, dictates not measvres to reduce, but those which sustain the powers of life in chronic inflammations. It dictates measures to develop appetite and improve the digestive processes, abundant nutritive supplies, and, in short, the remedies and hygienic means which invigorate and strengthen the body. The "building up" treatment, as it is significantly called, has contributed largely to the more successful management of chronic affections since the days of Broussaisism. Some of the most striking examples of the efficacy of this treatment which I have seen have cases of chronic pleurisy, in which speedy and progressive improvement followed directly the substitution of this treatment for measures opposed to the principles of conservatism. These examples are the more satisfactory because, by means of physical signs, the improvement within the chest was accurately determined at the same time that the local and general symptoms denoted a favorable change. Certain cutaneous inflammations, and cases of opthalmia, the parts in these affections being open to inspection, also afford examples not less striking.

Conservatism has been practically more fully applied to the management of essential fevers than of inflammatory affections. Since nearly all pathologists have admitted the essentiality of fever, and since physicians have ceased to agree with Southwood Smith in regarding inflammation as an almost concomitant and the chief source of danger in fever, the importance of preserving and sustaining the powers of life has been more and more appreciated, and, at the present moment, with the most intelligent practitioners, these are the leading objects in the treatment. In this remark I refer especially to fevers having a self-limited career, and not arrested by abortive measures. The periodical fevers are controllable by remedies

having a special efficacy. These remedies are conservative, acting in an imperceptible manner, and, given within proper limits, producing no destructive or injurious effects, even if not indicated. It is a curious fact, that the fevers which we are able to arrest with great certainty, *i. e.*, the periodical fevers, continue indefinitely if not arrested, and return, sooner or later, and more or less frequently, in the majority of cases; whereas the fevers which we cannot arrest with any certainty, if at all, *i. e.*, the continued fevers, the eruptive, and yellow fever, have a fixed duration, and, as a rule, are experienced only once. It is not without the bounds of a reasonable expectation that the means of arresting the last named fevers will hereafter be discovered. Reasoning by analogy, and from the pathological views now generally entertained, the means for this end must act by neutralizing a morbid material in the blood, or effecting its elimination; acting, therefore, in accordance with the principle of conservatism.

Tonic remedies, alcoholic stimulants, and nutritious diet are the measures for maintaining the vital forces during the course of the essential fevers. The importance of these measures is now so generally admitted as hardly to require argument or advocacy. The only questions for discussion relate to circumstances indicating their employment, the extent to which they are to be carried, and various details connected with their use. The discussion of these questions does not fall within the scope of this article. I may be indulged, however, in a few remarks on some interesting points connected with the subject.

One of these is the wonderful tolerance of alcoholic stimulants in certain cases of fever. Examples have been of late so often repeated, and are so generally familiar, that they need not be cited. How much at variance are the effects of pints, or even quarts, of spirit, given daily, with those produced in health! And how fully does fact, as well as analogous facts relating to the action of opium and other remedies, illustrate the liability to error in judging of the operation of therapeutic measures in disease from experimental observations in healthy persons! How surprised, but a few years ago, would have been the therapeutist if told that the action of alcohol, under certain morbid conditions, is in fact sedative; in other words, that, in certain cases of typhus or typhoid fever, two or three ounces of spirit given hourly lessen the frequency of the pulse, diminish the heat of skin, and render the mind more clear! But the past history of medicine

shows a tendency to push prevailing ideas to an extreme, against which the prudent physician should endeavor to guard himself. There is danger now of carrying the use of alcohol to an injudicious and dangerous extent. The principle of conservatism should be the guide. The object is to sustain the vital forces. The toleration is in proportion to the need of this sustaining agent. If it be used excessively in all cases, without discrimination, it will sometimes do harm, and life may be destroyed by alcoholic poisoning. We have already seen that, within certain limits, alcohol is eminently a conservative remedy, because even when not indicated, it is not destructive, and its operation is transient; but beyond certain limits its effects may be poisonous, provided it does not fulfill indications showing that the system is tolerant of quantities which would be dangerous in health. Let the indications, then, in individual cases, be carefully observed, and let the effects be carefully noticed, so as not to violate, but conform, to the rule of conservatism.

Some interesting points are connected with the dietetic management in cases of fever. In perfect health, the wants of the system for alimentary supplies are expressed by hunger and appetite. Common observation, however, teaches us that these sensations are not essential as prerequisites to digestion and nutrition. Almost every one has experienced a state, certainly abnormal, but not dependent upon any well-defined disease, and not interfering with the usual habits of mental and physical activity, in which food is taken habitually for a greater or less period without hunger or appetite, and nevertheless properly assimilated. Intense mental preoccupation and persisting depressing emotions may involve such a state. During the career of fevers, usually, hunger and appetite are wanting, but it is not to be inferred therefrom that the ability to appropriate nutriment is lost. Some have reasoned that the absence of the desire for food is always evidence of its not being needed, and a comparison has been made between the morbid condition, in this regard, in the essential fevers, and the natural state of hybernation. But the analogy holds good only as respects the disinclination for food. In hybernation, the respirations, the heart's action, muscular movements, and the functional exercise of all the organs, are reduced to the lowest point compatible with the preservation of life. In fever, the respirations are far oftener increased than diminished in frequency, and more oxygen enters the system than in health; the heart beats with unwonted fre-

quency, muscular action is not wanting, and in the more frequent respiratory movements it is above the healthy standard; the mental faculties are sometimes morbidly active, and, from the absence of sleep, often more continuously so than in health; calorification is increased, and various functions of the body manifest disordered activity. It seems sufficiently clear that no practical inferences are to be drawn from a comparison between the arrest of hunger and appetite in fever, and the suspension of these sensations in hybernation. In hybernation the system has no need for alimentary supplies, and, hence, there is no physiological expression of the want of them. In fever, the morbid conditions prevent the feeling of this want, although the need of alimentary supplies continues.

The correctness of the statement just made rests on clinical observation. Patients with fever, taking food without inclination, and even with repugnance, retain it, and no disturbance is produced by its ingestion; the fæcal evacuations may present a normal appearance, and, in some cases, in which a nutritious diet has been entered upon after the disease has existed for some time, there is an evident increase of muscular strength, although the career of the fever continues. These are clinical facts. And the conclusion is, digestion and nutrition are not incompatible with the state of fever, although hunger and appetite may be wanting. The faculty of perceiving these sensations is impaired or lost in consequence of the morbid condition of the nervous system, and, hence, they cease for the time to express the demands of the system. The perceptions are often so blunted that the mind takes no cognizance of other wants of the system. The urine is allowed to accumulate in the bladder, and, with the tongue desiccated, the patient manifests no desire for drink. Fatigue from lying continuously in the same position is not complained of. Local complications of the disease are not accompanied by pain. Under these circumstances, it is consistent that the sensations of hunger and appetite should not be experienced. The perceptive faculties, however, sometimes are not so much impaired as they appear to be. Desires and feelings may not be manifested from an extreme reluctance to make any exertion. Thus, patients not unfrequently drink with avidity when the cup is brought to their lips, who make no complaint of thirst; and in some cases, food, when presented, is also taken with relish.

In sustaining the powers of life in fevers, then, (and also in

certain other diseases,) the physician is not to be restrained by the absence of hunger and appetite. He is to act with reference to the wants of the system by endeavoring to secure the ingestion of food, concentrated, containing the necessary variety of alimentary principles, and ample in quantity. Here, too, as with regard to alcoholic stimulants, it is far better to begin earlier than is needed, than run any risk of delay, and to give more aliment than is required than not enough. An appreciation of the importance of alimentation in fevers is among the most important of the recent improvements in practice which exemplify the spirit of conservatism. But in all acute diseases, whenever the chief end of treatment is to support the powers of life, a nutritious diet is essentially important, and the same rules with regard to dietetic management are alike applicable.

It will suffice to notice the application of conservatism to those chronic affections collectively which destroy by gradual inroads upon the powers of life. In this class are grouped such affections as carcinoma, tuberculosis, chronic dysentery, cirrhosis, and Bright's disease. It is sufficiently clear that, with a view to the prolongation of life, when recovery is not expected, the great object is to retard, as much as possible, the failure of the vital forces. If we cannot "build up," we may do much to delay the progress of destruction. Evident as this is, it is not sufficiently appreciated by all practitioners.

Patients affected with incurable diseases are too often abandoned to merely palliative remedies, the fatal issue being considered as merely a question of time, and, therefore, not of much importance. This question of time, however, may be highly important to patients and their friends. To aid in the cure of diseases is, undoubtedly, the first aim of the physician; and next to this, when a cure is not to be effected, comes the prolongation of life, with health more or less impaired. The last of the grand objects of practice are palliation and euthanasia.

In the management of any incurable affection, conservatism dictates the measures which, in general terms, contribute to keep the body in the best possible condition compatible with the continuance or progress of the disease. In this way not only the inroads of the disease on the powers of life, but the destructive lesions in the parts affected, are often stayed. It may be assumed to be a rule in pathology, that a local affection involving structural changes is less likely to progress with rapidity, the closer the approximation to health in all other

respects. The practice which conservatism dictates in such cases is in accordance with this rule. An incurable lesion is sometimes so completely held in abeyance, and the system is rendered so tolerant of its continuance, that life may be preserved indefinitely, although a vital organ be affected. We meet with cases in which depositions of tubercle and carcinoma remain for a long time non-progressive and nearly innocuous. The conservative practice, moreover, favors those retrogressive changes by which even the disease just named may eventuate a cure.

To consider the measures for keeping the body in the best possible condition, would be to enter on a large but immensely important domain of practical medicine. I must content myself with saying that they consist, first, of a nutritious diet; next, of remedies to strengthen and invigorate; and last, of hygienic influences directed to the same end. The hygienic influences comprise exercise and everything relating to regimen, change of climate, mental diversion and encouragement —in short, whatever can be brought to bear favorably upon the welfare and vigor of the system. The hygienic is certainly not inferior in importance to the medical treatment, and here it is that the judgment and tact of the successful practitioner are especially brought into requisition.

A comparison of cases of pulmonary tuberculosis now and twenty-five years ago, illustrates the importance of the practical views just presented. The management of this disease twenty-five years ago was certainly not in accordance with the principle of conservatism. The measures employed, medicinal and hygienic, were, indeed, directly opposed to this principle. The antiphlogistic system of treatment was often adopted, under the belief that inflammation was the most impotent element of the local affection. Blood-letting, cathartics, mercurialization, severe counter-irritation, were considered as remedial, and to these were conjoined low diet and confinement within doors. Now, pulmonary tuberculosis is not cured in the majority of cases, although it is not incurable; and there is reason to believe that the proportion of cures is considerably larger than under the treatment just referred to. But, directing attention to the incurable cases, under the plan of treatment generally pursued at the present time, which is eminently conservative, how striking the contrast! Formerly, the instances of rapid progress of the disease were more numerous, and it almost invariably advanced with a steady march, rarely occupying many months in completing

its fatal career. Patients were usually confined to the bed for weeks before death, lingering on the borders of the grave, suffering from extreme debility, bed-sores, aphthæ, and colliquative diarrhœa. It was difficult to conceive of a picture more distressing and repulsive than that of an unfortunate being in the last stage of consumption. Conservatism has done much towards ameliorating the condition of consumptives, even when it is hopeless as regards recovery. Cases of so-called galloping consumption are less frequent. Life is not unfrequently prolonged and made comparatively comfortable for years. It is not uncommon to meet with instances of a considerable deposit of tubercle remaining quiescent or progressing very slowly, and the patient able to engage in the active occupations and enjoyments of life. Even when the disease is progressing to a fatal termination, the strength is usually so far preserved that a bedridden consumptive is now rarely seen, and it is not uncommon for patients to be out of doors almost up to the hour of their death. I appeal to those whose medical experience has extended over a quarter of a century for the truthfulness of this comparison.

In concluding these fragmentary remarks, let it be borne in mind that, important as is conservatism in medical practice, it is by no means inconsistent with the employment of efficient therapeutic agencies in the management of diseases. The conservative surgeon does not hesitate to use the knife and dismember the body, when convinced that thereby he may save life. So the conservative physician resorts without hesitation to his potential remedies—not less potent for good or evil than the scalpel—whenever he sees clearly that they will contribute to the safety and welfare of the patient.—*N. A. Med. Chir. Rev.—Am. Med. Monthly.*

EDITORIAL AND MISCELLANEOUS.

Volunteer Surgeons.—It would appear that our brethren in the army have no rights which their official superiors are bound to respect. Among other instances that of Surgeon David S. Hayes, Penn. 16th Vol., seems to have been one of peculiar hardship. The secular press have taken up the matter as an example of censurable indifference to trust, and coincidently indulged in many coarse expletives applied to the medical staff generally. We deem it no more than justice that his own explanation be given to the public. It will be recollected that the, formerly very much be-puffed, Secretary of War, some time since summarily removed, without any permission of explanation, Surgeon Hayes, for leaving a car load of wounded men on their arrival at Washington, late at night, and going to a hotel for supper and rest. Thus much the Secretary listened to and no more, ordering the papers of dismissal at once issued. A correspondent of the Philadelphia *Inquirer* writes as follows:

"The friends of Dr. Hayes think that he has been most hastily judged. They say that he telegraphed the War Department that the train would reach here at 9 o'clock Saturday night; that the dispatch, from some cause, never reached its destination; that he arrived in the middle of a storm, at midnight, and found that no provision had been made for the sick and wounded; that he endeavored to find the proper officer, but on account of the lateness of the hour, was unable to do so; that he left the wounded in charge of the surgeons who accompanied him; that he was completely exhausted from the duties which had devolved upon him for the previous three days, and could not help taking some repose before he started out on Sunday morning to seek the Surgeon-General. There is much sympathy manifested for him, and he claims to be able fully to vindicate himself from censure."

We do not think the case needs any comment. A harder worked, poorer paid, and more abused class of men than the

Army Surgeons can hardly be found. Generally with tenfold the brains of the Colonels and Brigadiers over them, with better educations, and more gentlemanly habits, they are treated with little more respect than the orderlies. They are expected to remedy, *instanter*, by potent combinations of drugs, the result of the vices of the officers and the reckless habits of the soldiery. It is rare that commanders will pay the slightest heed to the sanitary arrangements so earnestly besought by the surgeons. They expect their own indolence and heartlessness, not to say brutality, will be neutralized by the contents of the regimental medicine chest, and if they are not, then the surgeon is cursed and calumniated.

Worn down by constant toil, days and nights of exposure and unrest, more surgeons, proportionately, have been killed and disabled by disease than of any other class in the army, and yet they are rarely or never mentioned in official bulletins, and are never promoted except to additional hardships, with no increase of emoluments, present or prospective. And honorable Secretaries insolently refuse explanations or excuses when the physical part is positively incapable of sustaining, without some little repose, the immense burden imposed upon it. Nothing but the purest philanthropy and most self-sacrificing patriotism would permit a surgeon, capable of performing the duties of the office, to accept it under the present position of affairs. We trust, by and by, to hear of a reform in this whole matter. The haggard countenance and emaciated bodies of our professional brethren who have resigned, or received brief and niggardly furloughs, with their unanimous testimony, have cured us of the last lingering remains of zeal for professional connection with the army. We are willing to shoulder musket and knapsack whenever government calls ; but the pill bags and catling not just yet.

Chloroform Removing Bitterness.—It is stated that Chloroform has the property of modifying the taste of certain bitters, and when added in water, it nearly altogether removes the

bitterness. In cases where the Chloroform is not contraindicated, this little matter is worth recollection and trial.

Treatment of Fevers.—Prof. James Bryan, Brigade Surgeon, writes to the Boston *Med. Journal*, from which we extract the following:

There has been no one treatment adopted generally for typhus and typhoid fevers in this division. The expectant and stimulant have been the most common. The surgeons have relied chiefly upon what the ancients call the *naturales;* the use of whiskey punch, carbonate of ammonia, or turpentine—very little, however, of the two latter articles. Eberle's strong recommendations of the carbonate of ammonia seem to have been forgotten, and "Wood on turpentine" has been left to the mercy of caricaturing students in the halls of the "oldest medical institution" in the United States. The profession in the army, here, seem to be entirely at sea, no two of them appearing to agree on any plan of treatment. They appear to be like the Parisian philosophers, who anxiously inquired of Franklin what religion he professed, and found, much to their satisfaction, that he professed none. I have felt much dissatisfaction with this condition of practice, and have requested one of my colleagues to try, in some cases of pulmonary and cerebral congestion, *feelingly*, the now exploded lancet. His reports, thus far, have been favorable. In some cases of stupor and cerebral congestion, I have suggested the resort to one or two large doses of calomel, followed by Dover's powders and whiskey punch. These cases have done well also; and lastly, at my request, the calomel and quinine practice, ten and ten, has been resorted to where bilious remittent symptoms predominated at the beginning. This treatment seems still to hold its own in this district among the resident practitioners.

I remember well when Dr. Parry, from the valley of the Mississippi, many years ago, then a student in the Jefferson Medical College, threw a bomb shell into the profession in Philadelphia, by reading his thesis before the Medical Society, and quietly asking "what shall I do with the pulseless, moribund cases of congestive fever of the Mississippi?" Professor Meigs, in his usual enthusiastic and fanciful style, recommended "the lancet—the lancet—the lancet"! It, he said, would relieve the overloaded internal organs; it would take the weight from off the nervous centres; it would allow the

endangium to produce healthy blood. In a word, if the patient died, like that of the pupil of Dr. Sangrado, it would be for want of bleeding! Dr. Wood was astonished and dismayed at the doctrine, and, assisted by the brilliant but eccentric Jackson, both of the University, castigated the professor of the Jefferson Medical College most unmercifully. Prof. Wood did not approve of bleeding at all, except in rare cases, and "would treat the case according to circumstances." Professor Jackson gave a brilliant dissertation, which lasted part of two sessions of the Society, on the then newly published cell theory of Schwan and Schleiden, while Dr. Parry stated the western practice to be, in some cases, large doses of calomel, in others large doses of quinine, while others combined the quinine and calomel practice in one. Professor J. K. Mitchell took hold of this practice at once, enforcing it with his usual eloquence and point, and illustrating it in public and private practice during the rest of his life.

According to my observation, the same diseases exist on the southern coast of North Carolina, as those mentioned by Dr. Parry. Now what shall be our treatment? Will the profession of New England tell us what we shall do? Shall we use turpentine with Wood, calomel and quinine with Mitchell, or the lancet with Meigs and Rush? The hardships of the winter campaign at Hatteras, Roanoke and Newbern, have battered many of our men to a condition at least as low as that of the natives and negroes. Shall we fear this real or apparent prostration, and shun the lancet—the almost universal practice over our country for some time past? Shall we forget Hamilton's eulogies of cathartics? Shall we attempt to destroy the malarious poison in the blood by immense doses of quinine? Shall we stimulate with carbonate of ammonia, or piddle along with the turpentine emulsion? or shall we, in the language of one of our surgeons, "sock into our patients large doses of whiskey punch?" Or what shall we do?

In surgical practice, we are taught "*anceps remedium melius quam nullum.*" Is the lancet that doubtful remedy? Or is it right to see our patients die from the very beginning of the disease, without attempting to do something for their relief?

Dr. Bryan has expressed exactly the thoughts which arise in the minds of all young practitioners when called to face the reality of practice, instead of the *un*realities of ancient theorists, brilliantly imaginative lecturers and book writers.

We have not a particle of doubt that although he asks a variety of questions, he is dubious not in the least. With the experience and light of the present day, there is not room for question upon the points raised.

Bloodletting in such cases is simply murderous; calomel, in the manner suggested by Dr. B., incidentally useful, but the remedies are quinine, alcohol and nutriment. One or two full doses of calomel at the outset are almost invariably useful—the quinine and brandy *always*. Concentrated nutriment should speedily follow, or else typhoid prostration *will*. Opium is especially useful from its supporting power, its own great antiperiodic energy, and its remarkable efficiency in obviating the occasional unpleasant effects of the quinine. The indications for the use or non-use of the mercurial ought to be clear to any one competent for the position of army surgeon. Salivation in such cases is both unwarrantable and inexcusable.

Bloodletting in Puerperal Convulsions.—In the report of a meeting of the Conn. River Valley Assoc., in the Boston *Med. Jour.*, we find the following paragraph:

"Dr. Sawyer had seen several cases which were preceded by cephalalgia, in which he had recourse to copious bleeding, which resulted favorably. Dr. Crane considered the pathology to be pressure on the motor nerves, and thought this might be removed by venesection and cupping. Dr. Crowley had seen five cases, all of which had occurred after delivery. He had relied on phlebotomy and cathartics, with cold applications to the head. Dr. Gregg, of Newport, remarked that in an extensive practice of over fifty years, he had seen a good many cases both before and subsequently to delivery. He thought that in all cases where the contents of the uterus had not been removed, the first thing to be done would be to remove it. He then gave the history of several cases which illustrated this. Chloroform and ether he had never used; but for the benefit of the younger members of the profession, he would say that he had bled a patient to the extent of thirteen pounds in a day with great benefit."

To which may be rejoined that Dr. G. has practiced very

wisely in removing the contents of the uterus as soon as possible; very unwisely in never having used chloroform or ether, and very "heroically" in bleeding to the extent of *thirteen pounds in a day*, the addition of the words "with benefit" being rather dubious in propriety. Prompt removal of the contents of the uterus probably was coincident with that bleeding, and, thanks to the patient's vital power, she escaped both dangers. One of the physicians present commended the mixture of chloroform with ether as having a better effect than ether alone; probably the chloroform without the ether would have been better still. It was remarked that where the effect of the anæsthetic was most powerful, the contractions of the uterus were more forcible.

The era of bloodletting as principal agent, or even frequent subordinate, in puerperal convulsions, has gone by.

Sciatica.—In a conversation before the London Medical Society (*Lancet*, July, 1862,) on the subject of sciatica, Mr. Coulson remarked that in the chronic form he found benefit from relaxing the nerve by position and contemporaneous exhibition of Iodide of Potassium. Dr. Habershon called attention to the occasional dependence of sciatica upon inflamed hæmorrhoids, which had also been noticed by Sir B. Brodie and Mr. Ashton. He confirmed the value of Iod. Potassii, and occasionally of the Bichloride of Mercury. Others adduced cases depending on Hæmorrhoids. Dr. Leared had seen cases of a strictly inflammatory sort which required the usual remedies for inflammation. He lauded arsenic as the remedy *par excellence* for sciatica and neuralgia. Mr. Hulke praised the hypodermic use of morphine. The President, Dr. Sibson, had found the sesquioxide of iron of remarkable advantage in hospital cases, commencing with a dose of turpentine and castor oil, and a blister dressed with belladonna ointment. Speaking empirically, in those cases where neither syphilis, rheumatism, nor gout was present, this plan of treatment would be found most useful.

The Liver et alii.—Prof. Geo. Hasley read a paper on this subject before the Royal Med. and Chir. Society, which is noticed in the *London Lancet.* He recognizes the usual distinction between jaundice from suppression, and jaundice from reabsorption of the secreted but retained bile; an abstract of the paper we published in the August number, (p. 491,) which is worthy attention. In the discussion which ensued, Dr. Marcet said the examination of the fæces would often clear up difficulties in the diagnosis of the cause of jaundice. If the bile is retained, there is in the fæces an abnormal quantity of fat, not recognizable by the eye, but extractible by alcohol. The fæces are white, and the fatty matter consists of fatty acids. This of itself showed also that the pancreas was not alone in providing for the digestion of fat—the secreted bile being necessary for the perfection of the process.

The relation of the liver to the fat elaborating process in the system, has been too largely neglected, although that is perhaps the most important part of its function. It is probable that the blood corpuscles cannot be developed without the presence of fat supplied from the liver directly, or modified by its secretion. Hence the anæmia which speedily follows suspension or impairment of its function. Hence the benefit arising from the exhibition of cod-liver and other oils, which require little digestive change before being received into the lacteals. Hence the folly of vegetarianism, which entails excessive labor upon the liver in the manufacture of fat from elemental or chemically similar substances. Hence the absurdity of the direction to carefully skim off the floating globules of fat from the surface of "beef-tea," often when the patient requires the fat more than the nitrogenized compound. Hence the necessity often for alcoholic stimulants which appropriate nutriment would have made unnecessary. Hence the necessity, when the blood-making processes are too extreme, and the formative results of exudation are too active, as in the acute stage of inflammation, of suspending or materially lessening the supply of fatty food, and even causing elimination of

much of that prepared by the liver through the influence of mercurial and other cathartics.

It is common to speak of "portal venous congestion," or "hepatic venous congestion," as respectively the cause of jaundice, and the distinction is a good and valid one in one sense; but it should be recollected that congestion is rarely a mere mechanical affair. The heart, arteries, capillaries and veins constitute something more than a mere hydraulic system of tubes. Stasis of blood occurs in capillaries, arteries and veins from other than mechanical causes. The physiology of the circulation readily explains the pathology, and thus in every case of jaundice we have got to go back to the causes of the diminished or annihilated local action upon which the retention or obstruction depends. And then, seek to relieve, not solely the effect, but the cause—which will issue generally in something more than exhibition of mercurials, alkalies, cathartics, podophylline or inspissated bile.

To one who has carefully kept pace with the discoveries of Physiology, there are few subjects which are of greater interest than the relations of fat to the blood and the general system.

The well known milky appearance of the chyle in the lacteals is clearly due to the particles of oil which every where in solutions of albumen condense to themselves a vesicular coating from that substance. Here is the first step in that wonderful cytogenesis which eventually develops the blood or "liquid flesh." The lacteal glands aid in the process by bringing the chyle in intimate contact with developed blood. The direct effect is unknown in its essence, and it is needless to speculate upon it. The undeniable fact remains, that without the aid of oil or fat there is no cell.

The albumenoid vesicle containing fat, is impregnated or vivified by the dotted particles derived from the gland. Some escape, and dissolving yield up their contents to furnish nutrition to their germinant fellows.

The alkaline constituents of the blood (chyle, or lymph) are the means of this solution.

It would appear that fat is also necessary to the genesis of fibrin, as that depends upon the perfection of the blood corpuscle.

The stomach of Alexis St. Martin is chargeable with begetting great error in physiological notions. Digestion is perfect, or the reverse, according as it occurs in its proper place. Nitrogenized food is freely dissolved and absorbed from the gastric cavity,—oils and fats but to a very limited extent. It is probable that the small amount here absorbed is received by the minute villi as discovered by Dr. Neill (Vid. Am. Jour. Med. Sci., v. xxi, p. 13.) In like manner the duodenal and other intestinal mucus membrane by its blood vessels absorbs such portion of the albuminous food as may have escaped gastric absorption. Thus fats and oils are easily digestible in their proper place, which is *below* the stomach even when as readily examined as that of Alexis St. Martin.

Both observation and experiment show that there is within the system a chemistry which will convert not only saccharine, but even nitrogenized food into fat when little or none of that substance is taken as food. This phenomenon is entirely analogous to the production of wax by bees fed almost exclusively upon sugar. They will produce three times as much wax as the amount previously contained in their bodies or in the food taken. But some little wax must be taken in, or they will not manufacture any.

It is quite clear that the liver is the fat laboratory in the animal man. The fatty matter of vegetables in itself is insufficient to supply the requirements of histogenesis and repetition, but its presence in the portal blood favors the conversion of compounds which contain its elements, so that the bile and blood of the hepatic veins contain a very considerable amount. When this conversion is not required as in the case of animals freely supplied with oily food, there is much less bile secreted. Lehman discovered that in animals undergoing starvation there is an excess of fat and a deficiency of sugar in the portal vein, but that the condition is inversely changed in the hepatic vein.

The degradation of tissue is usually, if not invariably, accompanied with fat deposit instead of previous nitrogenized substance. Hence in the bodies of those who have died of inanition it is always noticed that the gall bladder is full of bile*—the blood bringing to the liver the result of fatty degeneration of the tissues, this being secreted partly with the bile, and partly, perhaps, converted into cholic acid and sugar.

The demand for sugar is for sustaining the animal heat; the demand for fat is primarily for the evolution of blood-cells, and secondarily for decomposition into cholic acid and sugar. The fatty liver furnishes little bile, but much sugar—the separation of the fat from the blood favoring the evolution of sugar, but the hepatic tissue having insufficient cell energy to further eliminate bile.

It need scarcely be remarked that fatty degeneration is produced—first, by a wrong or defective state or composition of the blood; second, by an insufficient supply of blood; third, by a deranged or obstructed influence of the nervous system, (eventuating, of course, and being properly included in the first cause), and fourth, by an imperfect, unhealthy or declining state of the part to be nourished.

There is hence no difficulty in seeing that though the cells of the liver may be gorged with oil, yet an insufficient quantity finds its way to the lacteals and the blood. Meantime sugar (liver-sugar) is produced in disproportionate amount, and being oxidated in all the tissues and cells develops more or less febrile heat.

In the healthy condition of the various organs when supplied with their appropriate food, the production of the various secretions we know to be uniform; but man is exposed to almost every variety of condition and food. The proportions must be maintained among the various constituents of the blood, or disease will ensue.

* Does not this explain why mechanical distension of the stomach, &c., with innutritious substances relieves the sensation of hunger—the bile being thus poured out into the duodenum and its fatty portion absorbed?

From our present knowledge upon this subject we may look upon the liver as a great regulator in the mechanism of nutrition.

It provides oil from substances which contain but its elements,—hence man can live without taking it directly as food, but as other organs which are called to excessive labor, so this in time must become diseased from this cause alone.

It unquestionably derives some adeps from the disintegrating blood cells brought by the splenic vein, the hæmatin of the old cells by deoxidation passing to the form of the coloring constituent of the bile,—the iron and oxygen in great part passing to the nutrition of the younger corpuscles. It may elaborate liver-sugar for respiratory uses, and, finally, eliminates an unstable chemical portion whose retention in the blood would be productive of serious mischief.

It has become quite fashionable of late to decry all allusions to diseases of the liver as decidedly old-fogyish or behind the times.

Dexterity in percussion, and oracular shaking of the head after applying the stethoscope bauble, are deemed sufficient substitutes for acuteness of penetration in discovering the causes of disease.

The urine, too, has its worshippers, and the test tube stand, spirit-lamp and meter (all well enough in their way) are considered worthy of supplanting the poor old liver of the fathers.

Nevertheless the liver is and must remain one (if not *the*) of the most important objects of diagnostic and prophylactic study. It is the prominent intermediate agent in converting the inert and lifeless to the active and vitalized.

Basing therapeutics upon the views herein set forth, it is seen that the range of administration of the fats and oils becomes exceedingly widened. They are not directly calorifacient, but they are necessary to the building up of heat carriers. They can thus be administered in a vast number of cases *where there is heat of the surface, but poverty of the blood.*

Thus in hectic and typhoid fevers and in the latter stages of all phlegmasiæ, when, as the older writers would say, there is heightened irritability with lessened tone.

Vegetable decoctions, wherewithal these diseases are continually plagued in common treatment, yield sugar and consequent heat or vitiated secretions,—the fats and oils bring living cells into action whereby the regular transmutations and developement of each and every tissue arise.

In tuberculosis this is peculiarly the case. Tuberculosis is the manifestation of diseased glandular action, in every case intimately connected with the non-reception or development of fat.

In the child the mesenteric glands and intestinal villi fail to develop the corpuscle or receive the oil.

In later life more frequently vitiated appetite and faulty teaching or habit disqualify the liver for performing its function.

The vegetarian*ism*, and the "low diet" dogma, implant phthisis in the systems of thousands, and tamely call it "hereditary" as though *vices* are necessarily so.

Consider the vast amount of oil which is secreted upon the investing integument and the waste to which it is subjected by hydropathic scrubbing.

Look at the delicate skin of the consumptive and the rapid oxygenation which is momentarily sapping the foundations of life. Then the disordered appetite, which *secundem artem* from a "dear dyspepsia grows a dire disease."

Inunction of oleaginous substances will, in the cases previously adverted to, afford vastly more relief than the water douching and sponging so much practised. *En passant*,—this is a remedy of much greater efficiency than commonly supposed. In all cases of poverty of blood corpuscles, but more especially in tuberculous cachexia, it is of wonderful efficacy.

In scarlatina its power is well acknowledged, but its *rationale* has not hitherto been satisfactorily explained.* No other

* A part of this article was published by the writer in June, 1857. This remark was more especially applicable at that time than now. But the whole subject has been practically too much ignored.

remedy will like it prevent the rapid decomposition of blood corpuscles, so commonly followed in this disease by dropsy or renal disturbance. The fat favors the development of energetic blood cells from albumen which otherwise is strained off in dropsical or urinary flux.

During its operations the lymphatics become true lacteals, and the lymph will grow milky like chyle, though not to the same extent.

Contrary as it may apper to received opinions, the emaciation and flux of diabetes are alleviated by it. Internally administered, there is theoretic danger of conversion by diseased hepatic action into sugar and cholic acid, but practically my own experience is favorable to its free use in connection with nitrogenized animal food.

The catalogue of applications, both externally and internally, might be extended to the verge of nosology, but is sufficient that we recognize the principle involved.

There is no so-called *tonic* medicine which can exert more than the merest modicum of the impression, capable of being produced by this active class of alimentary articles.

The antiphlogistic regimen essentially consists in counteracting the effects of the received adeps. Abstract oil and you simultaneously take away red corpuscles or oxygen carriers and fibrin producers. Bloodletting does the same. Cholagogues, as mercury, etc., urge the bile too rapidly along the intestinal tract to allow absorption of its hydrocarbon and resulting increased activity of cytogenesis.

Moderately administered they promote it by augmenting the conversion by the liver of this genetic medium and agent. When carried to excess, there is resulting cachexia from poverty of the blood in cells, and too abundant formation of liver sugar and hence atonic fever.

In warm climates the production of liver fat is nearly or quite sufficient for the purposes of blood genesis. Here there is danger of excess, as is shown by the ready and profuse flux of bile. As with the formative cells of the vegetable kingdom, there is rapid development and speedy decay.

The products of this decomposition readily accumulate, and if not excreted produce their well known effects upon the glands, blood, and nervous centres.

The dietetic and therapeutic principal is obvious.

A Practical Guide to the Study of the Diseases of the Eye: their Medical and Surgical Treatment. By HENRY W. WILLIAMS, M. D., etc,, etc. Boston, Ticknor & Fields. 1862.

A careful perusal of this unpretending little volume, more than sustains the anticipations with which we announced its reception last month. All the more common and important diseases of the eye, including indeed about all those which the general practitioner will see more than once or twice in a lifetime, are herein clearly, simply and yet graphically described. It gives exactly the information which the active practitioner desires, without any attempt at rhetorical flourish or affectation of extraordinarily profound learning.

We are especially gratified to observe that he treats the eye, as it is, as a part of the whole body with its vitality and functional perfection inextricably interwoven with the rest, and not as a mere mechanical appendage to be fumbled over, cauterized, scarified or lotioned (Egyptian fashion) by itself. He recognizes most thoroughly the simple physiological proposition that the perfection of this delicate organ, as of those more gross, depends upon its nutrition — *the perennial bath of healthy blood.*

We commend the chapter on *Iritis* as illustrating progress —as showing that the writer worships neither formularies gray with age, nor dogmas glittering with mediæval rhetoric.

We remember when mercury was considered the *sine qua non* in ritis—you could *see* its beautiful action as a remedy! All this has gone by—it was the Belladonna that did the work. Just as Calomel has always got the credit due the Opium given with it.

Briefly—we commend this book to our readers' libraries, and better still, to their careful perusal.

Dr. Davis' Institute—Not the Med. Dep. of "Lind University," but the one whose announcement will be found in our advertising pages. The well-earned reputation of Dr. Davis in his specialty will at once commend his infirmary to the notice of all who have patients of this unfortunate class under their charge. The odor of quackery or undue pretension does not hang around the *New York* Institute. Dr. Davis'

methods have been fully set forth in the medical journals and societies, and the success which has attended them has been very gratifying. It is rare that a general practitioner can treat cases of this kind satisfactorily either to himself or patient, and we believe that they can rely with great confidence upon the facilities offered by the well ordered and appointed "home" herein indicated.

Is there a Lower Deep?—It appears that the gentleman who does the State of Illinois the honor to direct the expenditure of its war fund; commissions its officers in military and civil life; who appoints examining boards which can scarcely be said to belong to either; and who, it is also whispered, assists personally in the consumption of some of its *cereal* products, has been pestering the War Department for the privilege of foisting upon the volunteer regiments sundry infinitesimal doctors. It turns out, from the published correspondence, that His Excellency in this particular was most disastrously snubbed. Confectionery of this attenuated sort doesn't find a ready market in these war times. We congratulate our readers that some sparkles of common sense still appear on the Black Sea at head-quarters.

But His Excellency was not thus to be put down. The sugar-plum gentry, the eclectics, the clap doctors, the uroscopians, and all that ilk, would not quietly submit. His Excellency had descended to the St. Giles, the Five Points of quackery and folly, and the vermin have naturally enough invested his august person. Their titillations and nibblings, their buzzings and bitings, have put him out of his senses, and he has striven to escape by tossing honey to them, done up in small parcels. The District Surgeoncies for examining candidates for the "exempt brigade," came to hand sweet as molasses. Not "a tub to the whale," but giblets to all Lilliput.

Here and there, *rari nantes in gurgite vasto*, in the list of appointees we see a name which would do credit to the profession in almost any position. Here and there, we see a "regular"—per chance a fossil regular, but still retaining a dim memory of the time when he listened to the Æsculapian patriarchs of Philadelphia. But how did the Governor find time amid his arduous duties to dig down for the rest of the motley crew? Professionally, the list in large part looks like a catalogue of the contents of the witches' cauldron in Macbeth.

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INTRODUCTORY ADDRESS

DELIVERED AT THE COMMENCEMENT OF THE SESSION OF 1862-3 OF RUSH MEDICAL COLLEGE,

By J. ADAMS ALLEN, M. D., LL. D.,
Professor of Principles and Practice of Medicine, and Clinical Medicine.

Off the coast of "the fast anchored isle" rises from the sea a range of ragged rocks which the tide at its ebb and flow alternately covers and discloses. When the storm rules the ocean, the spectacle presented is of most fearful grandeur. The waves break upon the reef with a power which appals the stoutest-hearted mariner.

It happens that this spot is precisely in the track of England's greatest maritime traffic. For ages it had been the terror of all those who go down to the sea in ships. Wo to those whom the darkness or the storm, or a trifling error in nautical calculations, brought into its neighborhood. Despairing signals hung out from tall masts availed nothing. Melancholy minute guns brought no answer save their own hoarse reverberations. The skeletons of massive men-of-war and peaceful merchantmen, alike lined the distant shore with their ribs of English oak.

Upon the uttermost verge of this dangerous shoal, national enterprise, by and by, planted a light-house. A little while it stood, but the great storms of autumn came and swept it away. It was replaced again, and again, and again, until the hearts of the majority failed them, and the attempt was desisted from. But there came a man who said the project might yet succeed—that all that was needed for success was

to avoid the errors of the past, and adapt the means to ends — to meet power by power, and, where the contest was unequal, to meet it by thoughtful invention such as clear human heads had abundance of. The thing was done, and to-night, as for years upon years, that beacon light has shone out upon the ocean and through the storm, and the great fear has departed, and the navies have sailed secure. Fragile enough looks the structure as it stands against the waves, the foam and the clouds, like an airy phantom, and though there never have been wanting those who have said it shall speedily fall, yet it is fastened to the rock, of material no less imperishable, and whilst generation after generation of noisy men shall come and go, it will still hold on high a sure light which shall guide the sailor in his course as safely as of old time did the pillar of fire the chosen tribes.

Not a hundred years ago and the great question whether men were competent to govern themselves was yet unsolved. The royal Georges and continental despots and diplomats thought not. There were plenty of people who believed that as God had a purpose in everything, and as certain families were good for nothing else, therefore, Q. E. D., they were specially fit for governing. But George Washington, Ben. Franklin, John Adams, John Hancock, Dr. Rush, and sundry others, thought otherwise, and they approved their faith by their works, and for more than three-quarters of a century this nation has shown that some men at least could govern themselves in creditable fashion. When we had fairly begun to believe the problem solved, and that our gubernatorial astronomical system was perfect—along came secession, with its perturbating asteroids, and the swaying of the poles has frightened some of the astronomers of the weaker sort into the belief that our system, after all, is not of the Keplerian and Newtonian kind, but of the effete Ptolemaic shape, and we ourselves not denizens of a mid-day civilization, but twilight Egyptians. Nevertheless, in our firm opinion, it is the vernal and not the autumnal equinox, and the storms accom-

panying it but herald a more glorious summer than the world of nations has yet seen. The Jeff. Davises, and Lees, and Cobbs, and Beauregards; the Yanceys, and Jacksons, and Floyds are nothing but nebulæ which telescopic cannon will speedily resolve into their original harmless elements.

This light-house among the nations has been anchored upon a sure rock, and the waves of rebellion, anarchy and usurpation, rage and dash harmlessly at its base.

Stability—the fixed point which our minds continually seek, notwithstanding their roaming, speculative tendency—can never exist save upon the ground-work of Truth. The attractions of material things always tend to a common centre, and the weightiest always moves thereto, whatever its occasional resiliencies and reboundings. So in the realms of science, which is but the appreciation by the human mind of its surroundings; all things seek the common centre—Truth. Now and then, from the time of Æsculapius till this day, some men have mistaken the reaction for the attraction; the centrifugal for the centripetal; but steadily and constantly the general mind has been approximating central truth.

When we take this science of Medicine, about which we are just now more especially interested, we find it has precisely the same history with all other things which men think they know. Men's thoughts have been pendulums vibrating to each extreme from central Truth, or they have under the influence of a perpetual tangential force revolved around and around it. Nothing has been more common than for a medical man to be, by the inherent force of his own intellect, prevented from escaping from the influence of central truth, whilst some vile dogma accidentally received has forever kept him in a great orbit at a distance from it. This never has done—this never will do. If you wish to get at the truth of any matter, you must let the mind be free. Its perceptions must be educated and its faculties developed. Its limbs must be unfettered, and no Delilah of dogmatism, or prejudice, or fancy, must be allowed to use her fatal shears upon the locks

of its strength. He who lacks confidence in his art can never be a good artist. No impostor even can thoroughly succeed until he first makes a dupe of himself. The man who believes to the uttermost is most truly powerful in the support of his belief. A doubtful cause, or a positive untruth, thoroughly believed in by its supporters will gain headway and a name among men; whilst a truth not at all, or only half believed, will limp and stumble in the race. A whole truth, wholly believed, is the "open sesame" to its possessor, and Ali Baba with all his forty thieves are powerless before its utterance.

Now then—not to be too discursive—young Gentlemen, if you wish to succeed in this art of Medicine which you have come up here to inquire after, you must believe in it, and trust in it, and anchor yourself upon it. When we, your temporary teachers, hold up a beacon to you, you must take care that it is an Eddystone light, and not a will-o-the-wisp, or a wrecker's lantern. When we present to you the principles of medicine, we want you to test them as earnestly, as sagaciously, and as cautiously as you would paper money —I would say coin, but the idea in these times would be too far-fetched and ludicrous.

We wish you to believe implicitly what we shall say to you in the ensuing series of lectures; not because *we* say it, but because it is the solid truth, upon which you can stand and bid defiance to the scarlet women of quackery, and all the regiments of medical delusion with their parti-colored uniforms and caps and bells.

Some things, and the fewer they are the more shall we rejoice, you will have at present to take upon trust with a like generous confidence you extend to Eastern bank notes, or occasionally even Illinois money, but we shall strive generally to give you Treasury notes, drawing not less than 7 3-10 per cent., guaranteed by the Republic of Science. They represent pure gold, but you must recollect that gold is scarce in war time, and the disciple of Æsculapius is a sworn soldier for all terrestrial time against ignorance and deceit, pretense and fraud.

Oportet discentem credere—oportet edoctum judicare—it is your duty to place confidence in what we tell you, where you have not full possession of the facts which warrant you in coming to a different conclusion from what we do; where you have full possession of these facts, you may judge. Medicine and Surgery are largely made up of the results of experience, which you have not, but where, as in many parts, they are founded on positively developed principles, you have no choice in the matter, you must accept them.

Putting the whole truth in a nut-shell, we may remark that to-day the larger portion of what you have to learn, during the next sixteen weeks, consists of facts as incontrovertible as the Ten Commandments, or—the Constitution of the United States.

You may have heard about disputes among medical men. It is the favorite theme of empirics and satirists. Learn now, if you have not before, that these disputes and differences of opinion do not touch the pith and marrow of the matter. It is a fact of history that the great wars of the world have occurred in consequence of questions of boundary and not with reference to the great central territory. Little things, outside of the great moving springs of commonwealths, have given rise to commotion and all confusion. And it is precisely so in Medicine. The great central territory of Medicine cannot be invaded. Nine-tenths of what we shall have to say to you is of that character that no debate can arise. If you, or any of you, have come here with the conviction that you must, as a matter of form, attend medical lectures to get a diploma, so as to be candidates for reception of official insolence as army surgeons, or poor pay and hard work as private practitioners, and that it is really not a matter of much importance whether you learn anything or not, as the next decade will overthrow the majority of it at the best—I beg of you to disabuse yourselves of the error just as speedily as possible, for I assure you it is a stupendous hallucination.

Here is my friend, the Prof. of Anatomy, who will convince

you that there is positively no question about the sphenoid bone or the circle of Willis; that the cardiac orifices are not openings for debate; that the extensors and flexors have quite other relations than to the manual of arms. He will convince you that the arteries are quite positive in their distribution, and that the veins are contrived to take up something else than streams of argument.

The Professor of Chemistry will demonstrate to you that, in his department, you have something else to deal with than gas of the metaphorical sort. That material substances are put together very ingeniously and unmistakably; that their taking apart involves something more than the wit of an epigrammatist, and that other things besides men and donkeys are "fearfully and wonderfully made." He will show you that the ponderables, whether solid or fluid, have to be mentally digested, and that the imponderables must be duly weighed. It won't do to tell him, by and by, that there is a difference of opinion upon this point, and that really you have not made up your mind.

And then my friend on the right — he who victimizes frogs and dogs, guinea pigs, rabbits, cats, *et id omne genus*, it will never do to say that his branch is very amusing and entertaining, and that on the whole you would pay attention to it, only that you design being a surgeon instead of a *savan*, and a doctor rather than a physiologist. He will prove to you that you can neither be the one nor the other, worth the name, unless you have fathomed not only the mysteries of anatomy—the organs in repose—but also of physiology—those of the organs in action. He will tell you in the lecture room, as he has frequently told me out of it, that every hour of the day in his practice, which all of our citizens know to be immense in extent, he finds that the facts of physiology are sure guides to his judgment; that they give confidence and power, and that without them he would feel like, what he hates more intensely than most men have capacity—an empiric and quack.

And then Materia Medica—he of the bottles and gallipots, the dried specimens and moist abominations, you will be most wretchedly deceived if you fancy that he will let you off without knowing about the armamentaria—where the tools come from, what they are, how to tell the good from the bad, how they individually affect the body in its different conditions of health and disease, when to use and when to avoid. All these things are quite other than speculative, as I believe my learned brother will fully expound to you.

A large part of the practitioner's duty will come under the purview of our friend on the left, who will convince you that the second part of the primeval curse and blessing involves his branch as a necessity, and that ninety-nine hundredths of his teachings are, not only unquestioned but, unquestionable truth. If you fail to apprehend them, and hoard them up in your memory—the time probably will come, even in this life, when, if you have a grain of human pride and sensibility, you will fervently pray for the rocks to fall upon you, and the hills to cover you out of sight.

In the series of lectures upon Surgery, Pathological and Operative, just now, there is especial interest. I do not need to urge it upon your attention—the times urge it upon you. The tide of war leaves wrecks of the human form all along the shores of civil life. But I beg your earnest study here, of those conservative methods which are distinguishing the surgeon of to-day, from him of the books and of past time. I violate none of proprieties of the occasion, when I assure you that in these halls you will be taught principles and methods, in this magnificent branch, brought fully up to the level of the hour.

There has gone abroad among the populace, an impression that a surgeon is emphatically a kind of animal, who lives and moves, and has his being by the knife. Limbs have been improperly sacrificed, and hence there is a tendency to the other extreme so that, instead of limbs, lives are now too often placed in jeopardy. It is trusted that you will hear and com-

prehend, and subsequently put in practice, precepts which shall render you, as surgeons, conservative of *both* lives and limbs. And you will learn that wielding the knife is but a limited portion of the surgeon's duty—and yet sometimes it is an inexorable duty. Some of you perchance think that all you need to know in order to be good surgeons, is, anatomy and certain mechanical methods. I beg your pardon, but it's a deplorable error. You will find that you cannot even be a good surgeon without thorough mastery of the curriculum of medical study. A man may be a good practitioner of medicine, without being skilled in operative surgery; but no man can be a whole surgeon without being a thoroughly educated physician. I do not hesitate to say that the grandest triumphs which crown the surgery of the present time, have been achieved by recognition of this cardinal truth. There is an *eclat* about the exploits of the bold handler of the catling, saw and scalpel, very attractive to the student, but he must ever recollect that great success is the constant attendant only of great attainments. A guerilla can make a dashing raid, but great victories belong to great generals who make battles not accidents, but assured conquests by scientific forecast. Here and there, it is to be admitted, advances have been made by happy chances, as a traveler in the desert may be saved from starvation by finding a lost bag of biscuit; but as the best way to ward off hunger is by ploughing and planting, sowing and reaping, so the only sure course to success as a surgeon, is by laying broad and deep the strong foundation of general and extensive knowledge.

It is a tradition among medical students, which antedates the memory of the oldest inhabitant, that the occupant of each chair in the medical college is officially bound to magnify his office. And to-morrow you will hear divers observations from my worthy colleagues, which, I doubt not, will give strong color to the suspicion that this tradition is founded upon fact. Each of them will assure you that his particular department is all-important; that "Ichabod" might be written upon the

Æsculapian temple if his particular pillar were torn away. And, believe me, Gentlemen, the statement of each will be, and is, true and undeniable to the uttermost letter. If some modern Samson in his blind rage should apply his brawny shoulders to any one of these great columns, the whole edifice would tumble into indiscriminate ruin. The curriculum of study requires the support of each branch. The Royal Arch of Medical Science demands the support of each one of these as, reciprocally, keystones to the rest.

The time has gone by when a man can be a good practitioner of medicine or surgery, without general knowledge of these different departments.

The world has kept moving since we were boys, and he who stands still falls in the rear, by the inexorable logic of events, as the politicians love to phrase the idea.

It is but a little while ago that physiology, as a science, was born—it is to be regretted that so many have not even yet recognized the advent of this prophet of an entirely new medical dispensation. For this beautiful science, deny it who may, has changed the practice of medicine from foundation to capstone.

Observe now—you cannot understand physiology unless you are generally and minutely acquainted with anatomy—it is sheer nonsense to think otherwise. Wherever a nerve thrills or an artery throbs, you have got to carry the scalpel and the lamp. You cannot run a steam engine even, save in the most hazardous and break-neck fashion, unless you understand its parts. Do you fancy you can play upon "the harp of a thousand strings" as easily as upon a tin trumpet? Some people appear to think so.

And then, when you have mastered anatomy, you can know nothing of physiology until you have the principles and facts of chemistry as familiar as household words. Mark this, for it is meant—earnestly meant. Perhaps some of you will say—Good Heavens! the human system is not a laboratory, nor the stomach a Papin's digester. Some of you may have read,

in some antediluvian book, that chemistry has nothing to do with the animal body. I pray you get rid of this idle fallacy —it is one of the devices of the great adversary of bodies. You will hear something about the correlation of physical and vital forces. You will hear that the human organism, however much or however little soul it has in it, is made up of material atoms, and all forms and shapes of matter and force operate within and around it, and you can have no idea of what either matter or force may be, unless you cultivate the closest intimacy with the chemist and all his formidable array of retorts, spirit lamps, test tubes, gasometers, electrical apparatus and batteries. Let me assure you, chemistry is everywhere a necessity to the medical man ; you might as well undertake to study and practice medicine without eyes or ears, as without anatomy or chemistry.

And here permit me one little word—Prof. Blaney, so long identified with our college, the present session will be absent from us. He is using his varied and extensive professional acquirements in the service of the national government. Some of you will miss his familiar face and genial smile. For "none know him but to love him, none name him but to praise." Ranking as a man of science second to no other American in his particular department, those of us who know him almost lose sight of his learning when we recall his personal qualities. We half forget the scholar and physician, in the accomplished gentleman and always frank and cordial friend. May all the gods of war and peace preserve him from the perils of the field and camp and hospital ; and may Abraham Lincoln & Co. see to it that his patriotic sacrifices may be crowned with something more tangible than glory.

The personal presence of the distinguished gentleman who is to fill the chair of chemistry, in Dr. Blaney's absence, prevents a word about him. The speaker may merely observe, that having himself attended two full courses of his lectures on this branch, he was particularly anxious, and is thoroughly content, to have our Elijah's mantle fall exactly where it has.

Thus far, nothing about Pathology, and hence a word must be thrown in. The whole world of medicine, not to speak of "the rest of mankind," assumed for ages that disease was something erratic, eccentric, or anything but an orderly phenomenon. Mythologists made it depend upon the arrow of some capricious god, and speculatists of all sorts, Christian, pagan and infidel, have fancied a multitudinous host of ghastly phantoms clasping each his particular dart ready to launch at poor victims; or again have depicted earth, air and sea full of grim messengers of death, each ready, vampire like, to seize upon specimens of mortality — candidates for immortality. That which was but a figment of poetry or mythology, unfortunately was translated into the terrible prose of common practice. The attempt was to deal with diseases as though entities—enemies to be met with specific weapons—devils to be fought with fire. They were to be tortured out of the body in which they had gained lodgement. Some people thought they would be soonest exorcised, by agents which would produce precisely opposite effects upon the worried organs. Others thought that they were solitary, inharmonious demons, and the way to drive off one was by effecting the lodgement of another. By this shrewd strategic movement, it was believed the original hostile demon would find it a corporeal and spiritual necessity to "change his base." Another set believed, and even now cherish and trumpet the belief, that, like people of the same trade and opinion, the nearer they are alike, the less they can agree; hence if you can get up a disease as near as possible like the original one, and yet not identical with it, the greater the chance of the dislodgement of the devil in possession. This, it is to be confessed, sounds like satire, but these are among the facts of history.

Some men positively believe that heat is life and cold is death; others think that—

> "Disease is dirt; all pain the patient feels
> Is but the soiling of the vital wheels"—

hence water is the sovereign panacea, and Father Matthew the modern Hippocrates.

Others think that if the patient is sick, it is evidence enough that he is not suitably "Biologized"—if you know what that means, in Heaven's name tell us!

We have not time even to glance at the vagaries which have been indulged, by men in the profession, and men and women out of the profession—we only allude to them to usher in the plain proposition that practical medicine is not a science of mysteries—it has nothing of the mysterious about it. It is a plain common sense affair, in which, perhaps, one man may excel another, precisely as one painter may excel another, not because of any occult virtue in the colors he employs, but because, as Mr. Opie says, he mixes them with *brains*. You will get your colors here; you will mix them with brains yourselves. If you can't do that—God help you!

When old Naaman the Syrian took a long journey to consult the celebrated Hebrew practitioner, he was terribly disappointed because the prophet did not mesmerize the leprous spot—making passes over it and invoking the *Dii Superiores* with potencies of infinite spiritualization,—and plenty of people in these days refuse all credit to medical practice which does not come up to Naaman's notion. The human mind dearly loves a mystery, and is half inclined to think, with Mr. Toots, that what is not mysterious is "of no consequence—none whatever." Dipping in Goose creek or the Chicago River certainly can neither of them be considered cleanly and desirable, but even this may rid some men of worse troubles. But tell a patient to swallow a compound as nauseous, if possible, as either, and he will do it with joy unspeakable.—Fifteen minutes before putting down this identical sentence, I read in the Chicago *Tribune* that Dr. Scovendyke, of the U. S. Hospital service, has discovered an infallible remedy for camp diarrhœa—what think you it is? Substitution of good food properly cooked, and good regimen for utter recklessness of habit? O no! *goose's gizzard!*—or any other fowl. Incidentally, Dr. Scovendyke remarks, that plentiful exhibition of opium and sugar of lead should accompany the gizzard.

O Dr. Scovendyke—Dr. Scovendyke, thou art the representative man—thou hast pluck to uphold the gizzard!

The statistics of English and continental military service show that the health of the soldiery is easily maintained upon a par with that of civil life. The question will recur—is it because the surgeons make constant use of goose's gizzard, or some other natural or supernatural agent? Or, by the baldest hypothesis, may it not depend upon the better observance of the laws of health and life? Will goose's gizzard have the effect in old time attributed to horse shoes nailed over the door? Or is it possible that hygiene has something to do with the matter?

This thing of goose's gizzard has wider relations than appear on the face of it. Dr. Scovendyke has opened a vein.

Order is not only Heaven's first law, but Earth's first law. Pathology is not an exception. The organs of the body, from the simplest cell up through muscle and gland to brain and spinal cord, act ever in an orderly manner. Change the conditions in which they are placed, and you change their action; but ever they act in accordance with the law of ORDER. Pathology is but Physiology with changed conditions of action.

Simple as the decalogue, as true as biblical promises. The study of Pathology, then, engrafts upon Physiology simply the study of the new conditions in which the organs are placed.

All of the practice of medicine, as in fact all of the practice of surgery, consists simply in restoring the conditions which Physiology in its widest import points out as necessary to the normal order.

The grand difference between the practice of medicine today and that of old time is, that now we seek to restore the conditions of health; then they sought specifics, panaceas, and Morrison's Pills;—except now perhaps some of us substitute Chlorate of Potash, Veratrum Viride or goose's gizzard. They used to beat the gongs and blow the hugags to drive away eclipses, with a *post hoc ergo propter hoc* argument

exceedingly favorable to repetition the next occultation. Astronomically that music is "played out," but now and then you will find floating through practice in the medical world a similar waif from antiquity. This is illustrated in what is called "perturbating" treatment. You do not know what to do for a patient, or you have failed heretofore; according to this delectable system you must go to work to make him so much worse, that if he chances to recover from it, he shall believe himself about well from strong contrast. I need not say that in the light of modern physiology and pathology, this is simply—egregious folly.

Men are very much alike, and the influences which operate upon them are very similar, hence the derangements to which they are subjected have strong resemblances. These resemblances occurring often in groups, it is convenient to designate these groups by particular names, but it must be recollected that these names are wholly arbitrary—they have no foundation in nature. Take even the most striking groups, those produced apparently by a specific poison, small pox, measles, scarlet fever, etc., etc., and the whole medical world knows, or should know, that the so-called disease is not a uniform phenomenon. Take Typhoid Fever, Pneumonia, Hepatitis, Delirium Tremens, Phthisis, Rheumatism; years ago it was supposed that diagnosing, or naming, these affections was sufficient to indicate the treatment. To-day the veriest tyro knows (or if he does not know, ought to be basted for his ignorance) that the name is by no means a sure index of treatment. The Magnetic needle ought to point due North, but it does not point North ever, and sometimes indeed it points in almost any other direction. But this is not a fair illustration, for the needle is vastly truer to the pole than is the name of a disease to its treatment.

I know this opens a capital loop-hole to idleness. Some men will say there are lions in the way, and will wait till they leave—about as endless a waiting as for the flood of the river to run by. But this will never do. It is easy to say you will

treat diseases upon "general principles;" but what are your "general principles?"

The time has gone by when, compendiously enough, you can bleed and give calomel for what is called "inflammation," a term which, like charity, has covered a multitude of sins. The time has not even come when Veratrum Viride or Tartarized Antimony may be substituted. You have got to mix these things, and many others, with brains, in order to give proper color to your claim to practice medicine. Goose's gizzard won't answer.

You will find that the world has moved away even from much that is in your text books. The most that is in them still stands and will stand forever, but speculations, and dogmas, and fancies, and hypotheses, which yet do too much abound in medical works, grow small by degrees and beautifully less as the years move on. Cullen's "spasm of the extreme vessels" and Cullen's treatment of diseases have in great part passed into the Beulah, the beatitude of practical historical oblivion; but Cullen's descriptions of what he actually saw, are as vivid and truthful now as ever. The "archeus" of Van Helmont has been dethroned, and the "morbid spissitude" of Boerhaave has been dissolved, but the greater part of what these keen observers set down is recorded for all ages.

Opinions, and doctrines and systems fade away, but facts and the laws legitimately induced from them can never be overthrown. You may wrongly interpret the fact and to you it is therefore essentially a falsity, but nevertheless you must recollect that the truth, as such, is wholly independent of your or my reception of it. Truth scarcely needs logic to sustain it; indeed it may be asserted, almost without reservation, that whatever requires fine-spun and long-drawn argument to convince, is a little more likely to be false than true. Good eyes are achromatic, but it is easy to apply to them various mechanisms which shall distort everything around, and cover the most transparent truth with a prismatic halo of falsehood.

A good sound fund of common sense, an article popularly well understood, but which all the metaphysicians have failed satisfactorily to define, is worth in our profession whole acres of that morbid mental constitution so often supposed to be genius. It is a melancholy fact that so-called geniuses in medicine are, ten to one, the worst practitioners extant, and their teachings are about as useful and reliable as the sheet iron thunder of a theatre in a dry season. This very useful commodity, common sense, is worth assiduous cultivation. So far as the practice of medicine is concerned, I can assure you that an investment in that stock will be worth more to you than—the perusal even of Paine's big volumes on the fossiliferous strata of medical bibliography and learning.

But remember that common sense in a head without knowledge, is like the precious jewel in the head of the ugly and venomous toad—it is power without an engine—gold in the pockets of a Selkirk—spurs and a standing collar to the king of all the Mosquitos. Keep what common sense you happen to have by you; get more if you can, and then acquire all stores of knowledge. This your common sense will fashion into enginery and instruments which shall compel the elements to be your servitors.

Do not lose sight and memory of the slightest fact bearing upon the science. At the best you will learn too little. The fact which perhaps now seems trivial to you, by and by, in the chamber of sickness, or of study, may supply the last link in the chain of your discovery—it may prove the sure clue to the labyrinth of disease and its remedy. The little motion of the needle gave a new world to Columbus and mankind. The imprisoned forces of a water drop may explode the mined magazine, bring back life from the grasp of death, may determine a nation's existence or a despot's doom. One little wire laid upon another and then another, and so on, and on, has spanned the abyss of Niagara so that great locomotives and gigantic railway trains sweep over it in perfect safety, though hung at a dizzy altitude in air. A little touch upon a black

grain, not so big as the head of a fairy's bodkin, and a hundred pound ball goes hurtling through the atmosphere, swifter and more destructive than the thunderbolts of fabled Jove.

There is said to be a point in the animal nervous centre where if you insert a needle, a little way only, life vanishes. And thus all knowledge is made up of littles, and he who scorns them can never be truly wise.

The fact is, attention to the little things constitutes the grand distinction between the good and the poor practitioner. A vast number of men can perform surgical operations even of the most capital character, but their success will be the most diverse in degree. One, content with a brilliant use of the knife, which he handles as lightly and daintily as a writing master flourishes the quill, will operate to the admiration of all bystanders, but, while the operator recovers, the patient dies, simply because he does not attend to those little circumstances which determine, first, the propriety of the operation, and, second, by judicious after-treatment secure its success.

The popular mind is dazzled by the off-hand bluff decision of a "heroic" practitioner, who now and then removes disease by a magnificent *coup d'etat*, but the profession have learned, by grim and sad experience, to distrust the architect of great cures. The triumphant Garibaldi of one campaign, speedily is transformed into the defeated, wounded, imprisoned and broken-hearted Garibaldi of the next.

Be assured you can not work miracles, although the apostles of some false god undertake to persuade you that the day for miracles has not yet passed.

You will succeed, if you succeed at all, by patient study and constant accumulation of truths. Not that popular success will wait upon your knowledge—that by no means follows—for popular success is just now more likely to be the meed of the charlatan, the quack and the knave, than that of the true scholar. But the eventual reward is certain. Burglary is sometimes easier than honest toil and the profits more immediate and abundant, but I am not here to advise you to take

that up as a branch of business. The first element of success is that you really deserve it. And the way to deserve it is, not by cramming from a manual, or stuffing for an examination, whereby you may possibly outwit even the Examining Board, but by steady, straightforward gathering up and digesting of solid knowledge.

We are fallen upon strange times. Two years ago and had any one predicted the things which we now see about us, he would have met the fortune of Cassandra at old Troy. None would have believed, and none would have paid the slightest heed.

Two years ago and the medical profession was tolerated. Legislatures and all the powers that were, looked upon us as merely an incidental appendage, and not as a necessity of society. Political charlatans thought to gain ascendancy by fostering the bastard scions of the medical tree. Medical men, relying upon the impregnability of their position, like Major Anderson at Sumter, allowed the hordes of quackery to establish batteries all around them. The fiat had gone out from headquarters—bear and forbear. The laws did not protect us and demagogues attacked us. Pitiful whipsters satirized us; spiritual tables thumped against us; homœopathists annoyed us as the fly did Uncle Toby. The country was full of people; population was a drug, and Malthus was invoked against Hymen. Horses and cattle were considered valuable property, and agriculturists took especial care of them. Men were at a discount; children a misfortune, and women only ornamental.

To-day things are quite different. The country recognizes the value of men. The Lilliputians have sent up squeak after squeak of rage; but the country recognizes and acknowledges its want of medical men,—not shams, not etherealized nonentities, or wooden-headed knaves. Population has ceased to be a drug, and men with sound minds and healthy bodies are admitted to be the sinews of war. Examining Boards, too often the offspring of political adultery, and the creatures of emascu-

lated cliques, have done what they could to prevent fulfillment of the national want, but to-day the medical man stands the peer of the proudest general, and to his skill more than to the boasted strategy of the military schools is success or defeat attributable.

The bayonets and bullets of battle slay infinitely fewer than the vile hygienic arrangements, and unnecessary villainy of the camps. To conduct this war to a successful termination, discreet and sensible physicians are worth more than all the great generals, the military celebrities and geniuses the crisis has yet spawned.

I do not speak loosely or unadvisedly—the statistics are before the world. The great element of success is men, healthy, strong men, and in the dark and gloomy night of war which is upon us, the medical profession, more than any and all others, are the arbiters of the nation's destiny. I throw down the glove to any who dares dispute this primal fact. The surgeon of a regiment has an infinitely more responsible duty than its colonel, and that he should be ranked by the latter, is a paradox which future ages will look upon with unmitigated astonishment and disgust. More medical men, proportionately, than of any other class have fallen victims of the war, and to-day more are willing to assume the perils of the camp and field.

Many of you, I know, are preparing for a part in this great struggle for national existence. We, of the Faculty, will promise you our best efforts to suitably prepare you for this vast responsibility. We ask you to be sincere and earnest and industrious. We shall not decive you by the idea that we have possession of miraculous amulets against disaster; that we have panaceas, whether Calomel, Veratrum Viride, Chlorate of Potash, or even Quinine and Goose's gizzard to present you with. We shall endeavor to explain to you the physical, and, to some extent, the mental structure of man, and the varying influences which operate upon him. With the first Napoleon we say, "the tools to him who knows how

to handle them." We shall do our best. We only ask that you shall do yours.

We trust that in one thing you may be disappointed—that before the brief session now before us is ended, this deplorable strife may be over; that the curtain may fall upon this fearful drama; not upon the 'shattered fragments of a once glorious but now dissevered Union,' but upon the more magnificent tableau of the great family of States, hand in hand, destined to be "the praise and heroic song of all posterity."

We look for peace—honorable and glorious. But whether it comes sooner or later, you will find that the medical profession will emerge from the conflict crowned with laurels heretofore denied, but honorably won.

There is not one of your present instructors who would not, long before this been in the ranks of the grand army of the Union, if he had not believed that duty required him to take the part of preparing those for the conflict whom the nation needs more than it needs arms or munitions of war.

We have thus a double duty: to prepare you for the gentle and kindly duties of peace, or for the stern and fearful demands of the war.

On our part, we pledge again our best efforts. On yours, we ask but a realization of your duty and responsibility. To whatever of assistance we may afford you in the work now at the door, on behalf of my colleagues and for myself—I bid you cordial WELCOME!

FOREIGN CORRESPONDENCE.

EXTRACTS FROM A LETTER FROM E. L. HOLMES, M. D., OF CHICAGO.

VIENNA, July 27, 1862.

I have now been in this city nearly six weeks, and have spent several hours daily in the hospital. I am more convinced than ever, that in many respects, Vienna offers the medical student better facilities for the study of clinical medicine, than can

be found in any other city in the world. I express this opinion not only from my own personal experience and observation, but also from the testimony of medical men from nearly every country of Europe and America, whom I have met here and in other German cities. Practitioners who have spent months in London, Paris and Berlin, whose opinion is worthy of respect, have assured me that for the study of general medicine and surgery, they believe Vienna is superior to all other cities of Europe. This superiority consists not in the fact that there are more patients and better instructors in Vienna, but that here everything is arranged especially for the convenience of the student, so that he can attend some clinic at almost any hour of the day, and can also take special instruction in the diagnosis and treatment of the diseases of nearly every organ of the body.

And yet I may here say that American students, who have improved all the advantages offered them in our large cities, and have had the opportunity of spending a year or two in a good hospital, as assistants, need not fear a comparison with the great majority of medical students who are graduated at the European universities. But comparatively few of our students in America have the privilege of residing as assistants in hospitals, or of *spending several hours daily* in the clinical study of disease.

The present general Hospital—Allgemeinenkrankenhaus—was founded in the year 1784 by the Emperor Joseph II. It is situated in one of the municipal divisions of the city, near the glacis or open space which serves as a park for the people of Vienna. Although surrounded on all sides by dwellings, the proximity to this open space and the constant change of air produced by the strong winds which continually blow from the distant mountains render the locality of the hospital quite healthy. The grounds of the hospital, irregular in shape and extending over many acres, are surrounded by a series of two-story buildings. On one street the hospital is more than one thousand feet long, and on another running at right angles to

the first, more than six hundred feet. The other two sides of the grounds are quite irregular. This large enclosure is subdivided into ten large courts, by series of buildings running at right angles with each other. These courts communicate with each other by means of large arches formed through the buildings and are laid out in pleasant walks and greens, and ornamented with good shade trees, shrubbery and fountains, thus affording suitable promenades for convalescent patients. The largest court, into which one enters from the main street under a high archway, contains several acres, ornamented as I have described, and in itself is a proof of the taste and humanity of the founders of the hospital. On the side of this court, opposite to the entrance, is the hospital chapel. On the left hand side is a building containing the offices of the superintendent and his assistants and several wards for patients, in two of which Scoda gives his clinical lectures.

These buildings are almost wholly occupied by patients, certain portions being reserved for residences of visiting surgeons and physicians, their assistants and others employed in the hospital; and also for store rooms for provisions, linen bedding, kitchen, etc.

The hospital is furnished with a good supply of drugs and medicines, which are dispensed by the hospital apothecary.

I have been informed that the present capacity of the hospital is sufficient for two thousand patients, although a much greater number can be accommodated in emergencies. In addition to the patients there are a large number of persons constantly employed in nursing, washing linen and repairing and cleaning the building of the hospital.

The buildings are very simple, plain structures, without any of the so-called modern improvements in the mode of ventilating, heating or supplying water. There are generally no means of ventilating the wards except from the windows on each side. As each ward is usually provided with many windows, the change of air is readily effected, although the beds are placed at a distance of only two feet and a half apart.

Some of the wards in the lower stories, however, are dark, damp, and not well ventilated.

Upon the whole the hospital, with its bedding and clothing for the patients, is kept as clean as usual in such large public institutions. In several points relating to sanitary arrangements the hospital is inferior to the new hospitals of Hamburg, Berlin, Paris and other cities that I have visited.

Back of the hospital is the fine new building in which is the splendid pathological museum of Rokitansky, the dissecting rooms and the "dead house." The dead are left but an hour or two in the wards, when they are removed to a room in this building and placed upon beds, over which are machines connected by a cord with the hands of each corpse. The least movement of the hand connected with this cord moves a spring and rings a bell for the watcher. This precaution is taken to prevent premature interments. I was informed, however, that in no instance had a case been known in which a body supposed to be dead had given evidence of life by means of this contrivance.

The number of patients treated annually in this hospital is about 24,000. As the sick are brought to the hospital they are classified according to their diseases. The student will find wards filled respectively with patients affected with diseases of the eye, skin, chest, with syphilis and surgical and medical diseases. There are wards for lying-in women and for female patients affected with diseases peculiar to their sex. When we consider the number of patients constantly under treatment and the number annually received, we can readily understand what facilities the student may find for the study of every form of disease.

I intended to give an account of the different clinics and of the manner in which medical instruction is given in this hospital, but I must defer it to another time.

Allow me to say that I promised at the close of my last letter to speak of the "clinics," and not of the "churches," of Vienna, as printed.

ON THE DIFFICULTY OF ALWAYS MAKING AN EXACT DIAGNOSIS IN TYPHOID FEVER.

By G. C. PAOLI, M. D., Chicago.

I frankly admit that sometimes it is difficult for us to make a clear diagnosis in Typhoid Fever, though there may be many among us who doubt it, particularly those who have not an opportunity to make a post mortem examination. But when we consider how manifold are the symptoms of this disease, that the skin as well as the inner organs can be affected, and that when these organs are affected in their tissues, other symptoms arise, which are characteristic of another disease; while they are more constant in Typhoid Fever, we see them sometimes less predominant and sometimes wanting. And when we take in consideration the violence with which the disease sometimes appears, it is easily seen that the general symptoms sometimes bewilder us. It is also in this disease that we often find the greatest disproportions between the disease and the pathological changes. Thus we find the most violent cerebral symptoms can be present without any particular pathological change.

As a proof that Typhoid Fever can sometimes be compounded with Phthisis, a single case which I had under my treatment in Chicago will sufficiently illustrate. I will first relate the case, and then endeavor to place the symptoms separate from each other, so as to clearly present the difficulties of the diagnosis.

Louis Brenner, 28 years of age, of phthisical extraction, had suffered in childhood from scrofula, and had occasionally expectorated blood. Four weeks previous to the time I first saw him, he was attacked by fever, with frequent cough, but without any expectoration or dyspnœa. Pain behind os sternum; bowels irregular, rather loose; thirst and no appetite; had

been very debilitated; had perspired a great deal during the night, and felt chilly during the day.

The 1st of August, when I saw him, he had had a very violent cough, and sometimes vomiting during the attack; no expectoration; pulse 106; respiration 20; skin moist and warm; a general debility; no appetite, very thirsty, tongue clean and aphthous. His bowels had had no evacuation in two days. He was very emaciated.

Percussion the left, regio infraclavicularis little dull; auscultation presented nothing else than spread mucous rales. I prescribed Quinine and Expectorants.

August 2d—He slept well; the cough somewhat milder, no expectoration; the tongue as the previous day; the pulse 96; auscultation; the right regio infraclavicularis somewhat dull.

August 3d—The cough very frequent and difficult; the expectoration mucous and tenacious; pulse 110; diarrhœa.

August 4th—The cough and the expectoration the same; the diarrhœa has increased. I prescribed Dover's Powder, continued with the Quinine. The patient complained of sweating during the whole night.

August 5th—Chill and profuse sweat during the whole night. Pulse 104; abdomen painful to the touch; diarrhœa somewhat less.

August 6th—No sleep. The patient deaf; the tongue red and clean; pulse 120; diarrhœa; the skin warm and dry.

August 7th—No sleep; the deafness rather increased; the expectoration purulent; tongue clean and aphthous; very thirsty and continued night sweat.

August 8th—No sleep; delirium. The patient remained deaf. The expectoration purulent; abdomen distended and tender to the touch; pulse 130; debility increased; auscultation gave no sign of phthisis.

August 9th—Heaviness in the head, accompanied with dizziness; shaking motion of the hands; diarrhœa the same; expectorations thick and purulent.

August 10th—No sleep; the pulse 128; tongue somewhat

covered. On os sacrum I observed echymose. The patient perspired during the night.

11th—In the morning he died.

Post Mortem Examination.—The brain of healthy appearance.

The Lungs.—In the back part of the lower lobes I observed a hypostastic blood infiltration; in the right lung I observed small tubercules which had not the tubercular consistency, but were rather deposits of a peculiar nature. Pericardium natural; the heart somewhat relaxed, otherwise natural; the liver of natural size and consistency; the spleen somewhat larger than ordinary, also more solid and somewhat darker than in the natural state; the mesenteric glands neither hypertrophied, nor infiltration of blood; the stomach, duodenum and the greater part of jejunum healthy. In the lower part of jejunum the typhoid patches began to appear, which were more plainly visible in ileum, near to cœcum, where an extended ulceration appeared, and where the transverse muscular fibres were laid open, and in some places these fibres had disappeared and only the peritoneal membrane was visible.

On reading through these historia morbus, some perhaps might remark, how could such a case be considered phthisis, when not a few symptoms of typhoid were present?

I do not deny that this case was not with certainty considered Phthisis, because my treatment was that of Typhoid Fever; but, under the same treatment, could not the question arise whether the disease could not as well be considered as an acute Phthisis as Typhoid Fever, and such question I shall in the following try to sift and answer.

To make the question as plain as possible without being tedious, I will go through the symptoms and try to show how the same could be considered for both diseases, or taken singly, more for one than for the other. The facts which spoke for Phthisis were the patient's slender build, (Habitus tenor,) phthisical dispositions, scrofulous symptoms in his childhood, expectorations of blood with cough for several

years, and then for the last four weeks with fever connected, dry cough with dyspnœa. Later, purulent expectorations, with profuse sweating and great emaciation. What argued for the Typhoid Fever were the nervous symptoms and congestion of the brain, namely, deafness, delirium and heaviness in the head, shaking of the hands and the ecchymosis on os sacrum a short time before he died—symptoms which are present in both diseases, namely, the appearance of the tongue, diarrhœa, pain upon pressure on the abdomen, and the loss of strength. In regard to the auscultation and percussion, it is clear that they can not give any certain result, when the tubercles are somewhat equally distributed in both lungs, and if the individual is emaciated then will a clear percussion take place over the whole chest. Auscultation will not either, under these circumstances, give any abnormal sound, because the healthy tissues situated between the tubercles are sufficient to give a natural sound. The more or less mucous rales which, under these circumstances, can be more or less present, depend often on affections of the mucous membrane of bronchia, which often follows upon tuberculous depositions of the lungs.

The pathological state in acute Phthisis is characterized by equal distributions of crude tubercles in both lungs, which sometimes are soft, but scarcely glue together and produce caverns. It is therefore clear that we cannot depend on percussion as a diagnostical sign. I will only mention that there can be no question about chronic Phthisis where caverns and large tuberculous agglomerations give us unmistakable signs.

I will now mention some of the symptoms which are peculiar to both diseases, so as to arrive at a conclusion how it was possible in these precisely to diagnose it Typhoid Fever.

I will commence with the symptoms which depend on a sickly state of the mucous membrane of the lungs:

1st. *Cough.*—This had been very severe, particularly during the night, sometimes to such a degree that it produced vomiting. This cough was very much like that which accompanies

acute Phthisis, and, like it, characterised by its violence. When this accompanies Typhoid Fever the cough is generally very mild.

2. *Expectoration.*—In the commencement this was not present, but later it was first mucous and tenacious, and during the later period purulent. It therefore bore more resemblance to expectoration in Phthisis than Typhoid Fever, where it is more mucous.

3. *Dyspnea.*—This we know is not very severe in Phthisis when the fever is not very high. When I saw the patient the respiration was 20; later 26. The light dyspnœa would rather strengthen the diagnosis for a Phthisis than for a Typhoid Fever.

Signs of an Affection of the Intestines which might occur in both Diseases:

1. *The Clean Tongue.*—This state of the tongue occurs more frequently in Phthisis than in Typhoid Fever, when the tongue is more dry and furred, but when the incrustation loosens it becomes clean, particularly when the disease is of long duration. When I saw the patient the tongue was aphthous, which frequently occurs in Phthisis, but when the nervous symptoms appeared it become dry and furred, which is characteristic of Typhoid Fever.

2. That these symptoms were not conclusive, but spoke more in favor of Phthisis than Typhoid Fever.

Diarrhœa is a symptom of ulceration in both diseases, so that this symptom can not determine the diagnosis, and furthermore, diarrhœa can sometimes cease for a time in both diseases and appear again. We could argue that the diarrhœa in Phthisis generally first appears when the disease is further advanced, but we know that sometimes the deposition of tubercles commences earlier in the intestines than in the lungs, and that a diarrhœa can prove fatal to the patient before auscultations and percussions can diagnose the presence of tubercles of the lungs.

3. Pain which the patient felt by pressure on the abdomen

is a symptom in both diseases. The Phthisical ulcerations, as well as the Typhoid, have mostly their site in the region of the cœcum.

4. Emaciation is well known to be equally great in Typhoid Fever as in Phthisis, because the diarrhœa in both diseases is the cause of the emaciation. Experience has taught us that a patient whose lungs are filled up with tubercles does not emaciate in such a degree as when diarrhœa is present.

5. The nervous symptoms which appeared in the latter stage of the disease is the only sign which strengthened our diagnosis of a Typhoid Fever; still even this could be present in Phthisis, but this is very seldom the case.

6. The sweat, which we know is a constant symptom in Phthisis, but we rarely observe that it continues steadily in Typhoid Fever.

MALINGERING.—No. II.

By TOM. O. EDWARDS, M. D., Chicago.

You were kind enough to print my article on Malingering, and I fulfill my promise to continue the subject. In that communication I referred to increased and diminished size of parts, to the production of tumors by inflating the subcutaneous tissue with air, the similation of ascites hydrocephalus, dropsies of joints, malformation of joints, curvatures of the spine, wounds, ulcers, superficial inflammations, spasmodic affections, as epilepsy and hysteria and paralytic affections, and endeavored briefly to point out the diagnostic signs between the real and feigned diseases mentioned. There came under the classification of diseases obvious to the senses another class of diseases not obvious to the senses, but dependant upon the description of the impostor. We may divide this class into diseases of exalted or reduced sensibility, of pain, or absence of sensation.

The obscurity which ever has and ever will enshroud the nervous system, render the efforts of the physiologist in his enquiries of the cause of exalted sensibility in pain, extremely obscure and unsatisfactory. Increased sensibility in a part may exist and no visible sign of its presence, hence this symptom is more frequently assumed than any other from the great success and unanimity with which it is practiced. There are many external pains, such as tic doloreux, the causes of which are obscure, and which leave no visible sign of their existance, and yet no disease is more formidable in suffering or less amenable to treatment. Men have committed suicide rather than endure the torture of a disease, which externally gave no evidence of its presence. Upon the patient's statements we are compelled to rely for information in relation to the seat and violence of such affections, and we cannot be too careful in giving opinions in a disease the only element or phenomenon of which is pain, as gross frauds may be the result of our diagnosis, or patients in real disease may be regarded as feigning. The nature of the pain, the presence or absence of the symptoms of disease with which it is ordinarily associated, the general character and appearance of the patient, and the consistent account given of the case are important items for observation. We should guard opinions in examination of diseases in which pain alone is the cause of complaint, and should rely on time and accident to expose the fraud. Internal pains are mostly assumed, as those on the exterior are regarded as trivial, and a train of phenomena, such as heat, redness or unnatural color, are not unusually attendants on the real suffering. Gout and Rheumatism are favorites with Army Malingerers. Neither of these diseases can exist in severity without inducing changes in their locality. Heat, redness, tumefaction or retraction of the parts are characteristic of these diseases. True, there may be slight cause of complaint, and from peculiarity of organization or fretfulness of temper the case may be magnified. We have also pains, severe and long-continued, from scurvy and syphilis, the

seat of which cannot be ascertained. The Malingerer will seldom submit to severe agents in these assumed external diseases. He will most commonly ask if nothing milder could be used, and if his request be acquiesced in, he will be better or worse until he is assured severe treatment will be instituted and then he is suddenly cured.

Internal pains selected by one feigning illness will, if properly managed, lead to detection. Thus a patient complains of constant agonizing pain in the head; he has no vertigo, no loss of sleep, fever or delirium; he says he has violent, deep-seated pain in the chest, and neither cough, difficult respiration nor fever be present; pain in the stomach and bowels, and neither impaired digestion nor loss of appetite be present; pain in the kidneys, and there is no retraction of the testicle nor diminution or alteration in the urine. Should any or all these necessary attendants upon these diseases be absent, and only pain be complained of, we have grounds of suspicion which it would be well not to disregard. If these pains are said to be constant and intensely violent, and yet the patient sleeps well and enjoys his food, there is room for doubt. We should avoid the exposure of our suspicions and be careful in our prescriptions. If we desire to place him under the influence of anodynes, they should be administered in food, as the sagacity of the patient may detect the purpose and he will measurably thwart our purpose.

The most astute minds have been imposed upon by the assumption of pain, and long, protracted, fatal suffering has been declared feigned, and the patient deprived of sympathy and kindness. Fodere relates a case in which he mistook real pain for feigned. "I refused (he says) for fifteen years, a certificate of exemption to a young soldier, who complained of violent pains, sometimes in one limb, and sometimes in another, and occasionally in the thorax and pericranium, without any external sign to indicate its existence. He died in the hospital from the effects of the malady—which he always insisted was a species of rheumatism. I examined the body

after the death—viewed all the former seats of disease—but discovered nothing, either in the membranes, muscles, nerves, or viscera, and was hence led to believe that life was destroyed solely by the repetition and duration of these pains." Bitter was his mortification and regret that he had persisted so long in opposing the wishes and depriving the soldier of his discharge, and in the leniency of the remembrance of this case, the following one was presented to him. An artillerist from the Hart de Bonce, was brought to the hospital with a violent pain in his left leg, which was attributed to sleeping on the damp ground. During the space of eight months, a variety of antimonial preparations, together with mercurials and tonics, when indicated, were administered, with local remedies, but without any relief. The leg, from the repeated use of epispastics and cauteries, became thin, and rather shorter than the other, while from the low diet ordered there was a general paleness and lankness of the system. Under these circumstances, Fœdere could not refuse him a certificate as a real invalid. With the aid of his crutches he dragged himself to Versailles, where he obtained the promise of a discharge. He was ordered to return to the fort to await its arrival; but on his way thither, being overjoyed, he was met by his commander, walking without his crutches. On being put into prison, he confessed the fraud. It will require close observation and an intimate acquaintance with real disease to detect those of which pain is the most prominent symptom, as no words can adequately describe the difference. A general set of phenomena must be carefully sought and traced to their origin, such as gesture, expression of countenance, posture, and uniformity of symptoms.

Diseases attended by diminished sensibility are frequently assumed, and sometimes successfully. The most common is Amaurosis, and so successfully can this be assumed, that no possible means, other than careful watching, can detect the fraud. The pupil is dilated; the eye is learned to roll, and a feigned inability to fix the sight upon an object, are the symp-

toms. These are produced by the use of agents that act upon the nerves of the retina, and produce dilatation. Hyoscyamus, Belladona, etc., are locally employed in cases of this disease; when recent we may by carefully examining the patient be enabled, by the absence of all gastric derangements and febrile phenomena, to be put upon our guard and by putting a strict watch upon the actions of the patient, time will develope the rest. Fodere recommends the placing of the patient on a precipice, and ordering him forward. If there be real blindness, this procedure would be cruel and fatal, and was exhibited in a case of a recruit who was suspected of assuming blindness, being put on the bank of a river and ordered forward. He went forward and was rescued, but afterward confessed the fraud. Myopia, Amblyopia, Nyctalopia, Hemaolopia are all diseases found among Malingerers. We detect the Myopist feigner by putting on him glasses worn by persons known to be thus afflicted, or by placing a book close to his eyes and observe his efforts at reading.

No diseases are more difficult of successful treatment than those of the ear. Deeply encased within the bony enclosure, we have but limited means of investigating the changes induced by disease, and we are less familiar with diseases of the ear than any other organ. Deafness is therefore frequently assumed, but he who attempts the fraud must either be a bold or a skillful man. Those who are really deaf acquire a peculiar physiognomy and have certain gestures difficult to acquire, and are sometimes detected by a want of preparation for a sudden examination; yet the ingenuity and perseverance of some have put at fault the most skillful examination, and time and artifice have ultimately unmasked the impostor. Fodere, to whom we are indebted for most ingenious means of detecting the various frauds in disease, as well as the use of the most cruel tests, with all his observation, was frequently imposed upon. He examined a deserter alledged to be deaf. Every possible means failed, until Fodere assumed a patronizing air, assured him he should be discharged if he confessed to him

privately. The man's prudence was betrayed, and to the whisper of Fodere confessed the imposture. Another instance of the intentional dropping of a piece of money, attracting the patient's attention, and thus exposing him after various tests, such as firing pistols, or platoons of musketry, without the least affecting him. A constant watch should be set upon the actions of the suspected person, and matters calculated to excite or alarm his fears should be introduced in conversation. Put your hand upon his pulse, detail some bad news or terrible disaster, or threaten punishment, and you will generally perceive its increased action. Call them suddenly by name, fire a pistol closely to the ear, rouse them from sleep, or put them under the influence of ether, and on awakening the sense of hearing may be aroused and the will not enabled to control it. A very good way to test the truth or falsehood of a case occurred in a neighboring city a few years since. A man presented himself and by signs requested alms. The physician suspecting fraud, motioned him to sit down, and placing a note in his son's hand, told him to pretend to get that changed, but in reality to find a police officer, as this man's description answered well that of a man accused of having committed murder the night before, and he would have him arrested. The boy had scarcely left before the beggar hastily departed.

To assume to be deaf and dumb requires extraordinary skill, yet our books are full of cases resisting the most rigid and persistent examination. The means used to detect the imposition of deafness may be successfully employed in such cases as firing a pistol, or communicating startling or threatening information when examining the pulse. The double infliction is seldom present unless it be congenital, as the powers of articulation are never lost unless there be some cause appreciable to medical enquiry. Indeed it is a question whether the entire absence of the tongue is a sufficient cause for muteness, as cases are recorded of persons articulating without the tongue. In these instances the muscles belonging

to the tongue probably were not deficient. As a general rule it may be stated that if a person not deaf can *move* his tongue he is not dumb, as nothing short of complete paralysis can account for his being dumb. Three cases are recorded of the entire loss of tongue, yet articulation was distinct—a Portuguese girl, a boy having lost his tongue by gangrene, and an American girl—the history of each interesting and instructive. Also the history of Victor Fay, detected by Fodere, is one of the most successful and persistent cases of assumed muteness on record. He persisted two years; deceived the most scientific men in three countries, and finally was detected by mutes in a school designed for their special education. Those possessing Fodere's work will find in this case abundant food for reflection, and will be guarded in hasty prognosis.

We are frequently consulted by parents in relation to children at certain ages not talking, and our utmost skill and character are sometimes necessary to quiet apprehensions, or prevent the charlatans receiving credit for that which medical acumen and time will avert. A professor in a neighboring city lost the confidence of a family by not appreciating the fears and apparently sympathizing with them, or not sufficiently informing them, in the case of a child unable to articulate. She was five years old and had not spoken; heard very well; was sprightly and intelligent, but labored under chorea, and as a consequence the general health of the child was impaired. The professor prescribed a general routine, gave but little information as to the origin of the defection, and was superceded by a specialist, a publishing ear doctor, who carefully examined the case, observed the free motions of the tongue, prescribed a change of air, generous diet and preparations of Iron, with the certain promise of the speedy acquisition of the power of language. The case terminated favorably, and a flaming certificate brought many patients to the *skillful aurist*.

Diseases consisting of whole groups of symptoms are sometimes feigned. A disease to which all are subject and which probably destroys primarily or consecutively more lives than

others, is fever, which can be most fully counterfeited. The frequency of the pulse, chattering of the teeth and hot skin, may all be induced for effect. The use of strong stimulants, as brandy, gin or cantharides, also the introduction of capsicum, garlic or cloves into the rectum will produce a glow of skin similating fever. The brown tongue of Typhoid Fever is readily produced by Ext. Liquorice or coffee browned. I saw a family thrown into the greatest distress by a favorite son having been brought home frightfully excited, with violent vomiting and dilated pupils. The head was hot and between the paroxysms of vomiting; the skin was intensely hot; pulse irregular, sometimes frequent, then slow; articulation indistinct. Cold was applied to the head and sponging to the body during the excitement, and after that stage had passed warm brandy toddy restored strength and consciousness. The boy had made his first assay on manhood that day, by trying to learn to chew tobacco and had incautiously swallowed the juice. These symptoms were indicative of a severe paroxysm of fever, violently implicating the brain and stomach. Violent exercise with friction may excite the warmth and redness of the skin, and these present with a colored tongue, all the phenomena of fever. A few hours watching, if any doubts exist, will remove the obscurity, as the symptoms in these cases rapidly subside. A profoundly intoxicated man would embarrass a physician who failed to smell the breath of the patient, and not a few are the mistakes of casual observers, and severe animadversions have been passed on opinions of the existence of disease where intoxication only was present. I remember a mistake of this kind which not only influenced public opinion detrimentally to the doctor, but did more to overthrow opinions of the whole class of the Thompsonian fraternity in Maryland. As other popular illusions it had overcome the bounds raised by law for the protection of life, and all men were allowed the privilege of practicing and charging, by repeal of laws existing from the origin of the State. A shoemaker in Washington county bought a patent

and forgetting the maxim, *ne sutor*, etc., had so imposed on popular credulity as to have at one time the largest practice in three of the most populous counties. To test the doctor's skill (whose pretentions were the ridicule of all sensible men, and, unhappily, there as here they are not over numerous,) a profoundly intoxicated man was placed in bed by a party and the doctor suddenly summoned, and informed that from an upset from a sleigh the patient had been thrown on a curb stone and it was feared a fractured skull had resulted. The doctor carefully examined the case and very oracularly stated, "that the brain were not hurt, but that the patient would certainly die, and it was his wish that the body should be examined by the Calomel doctors, as one thing was plain—that a *Gut are broke*." Unfortunately for the doctor, a few hours sound sleep restored the patient, and the jest was too good for silence. No other argument was used in reply to the skill and success of the doctor than the ominous words that a "gut are broke," and in a much shorter time than had sufficed to give him the reputation and practice he had acquired, he disposed of his fine horses and is now engaged in his legitimate business.

As coma from fever or injuries of the brain and spine, differs in some respects from that induced by alcohol, the nose affords the best diagnosis. Also from disease resulting from the use of tobacco, in which coma exists, we have the fœtor of the breath to direct our enquiries.

Agues are feigned, i. e. the chill part. If no fever follows, we may be assured, after frequent repetition, that this is assumed. A gentleman of my acquaintance had a negro boy whose services were valuable, and who had a recurrence of fits of ague for several weeks. Three or four days nursing and treatment would check the paroxysms; but a return was constant, and the physician finding the health of the boy not impaired, by their frequent recurrence, gave him Tinct. Ant. and Jalap. The boy returned at the usual period, and when about to receive the unpleasant compound, drew the handkerchief

from his head and thought he was better, and as he could not get a seidlitz powder, declined taking anything, and did not return. As before observed, those who feign sickness are averse to active or unpleasant treatment. A mixture in the Eastern hospitals, called, for want of an official name, Mistura Diabolica, has performed most miraculous cures. It is composed of Assafœtida, Glauber's Salts and Aloes, and is given in very small doses, frequently repeated, so as constantly to impress the mouth with its nauseousness.

The diseases of the chest are more readily diagnosed, although formerly pneumonia was in the army, and now is, frequently assumed. It is unnecessary to put any educated physician on his guard in this disease, as his stethescope will detect the malinger; but by wounding the throat, hœmoptisis may be induced or pretended; mucous expectoration by constant hawking and coughing may also be produced; emaciation by abstinence or drinking acids, or by constantly sucking a copper coin may impair the tone of the stomach and thus induce disease. This is not uncommon in the army, and is traced to foreign importation.

The diseases of the abdominal cavity are assumed, and dyspepsia is the form. Care and watching can detect the fraud, as gastralgia, pyrosis and vomiting can be produced at will. Inflammation of the stomach is also assumed. The absence of the red papilla on the tongue and the long intermissions in vomiting are grounds of suspicion. Peritonitis and Hepatitis were much feigned in the British army in East India stations, and many discharges were granted soldiers for these diseases. After a time the urine was found colored with rhubarb; clay stools induced by muriatic acid; but the colored eye and skin, together with the listlessness and mental depression consequent upon this disease being absent, the surgeons suspected fraud, and the mixture Diabolica performed most remarkable cures, and was more successful than Mercury. Nephritis is sometimes assumed. This is not difficult in the male to detect, as the retraction of the testicle is the guide.

In the army, after severe attacks of Nephritis, the patients bring calculi alleged to have passed the urinary passage—found on analysis to be pebble, brick-bat or glass. In conclusion, as a general rule we would not be justified in treating disease assumed to be feigned differently from the real. Low diet, strict confinement to bed and nauseous medicines may be the effectual plan and will generally succeed. It is but fair to malinger ourselves and to lead the patients by questions into incongruous and incompatible answers, to detect by a fraud that which cunning and artifice had formed for our disgrace and their benefit. The impostor is ever averse to taking medicines, careful watching, visits at unusual and unexpected hours. This proceeding detected one case of five month's deception.

The absence of motive for assuming disease is not conclusive that it is real. Some from desire for sympathy of friends and others from no explicable cause than moral insanity, assume to be ill; yet it is well at all times to endeavor to obtain the motive, as this may be a clue to the whole disease. The previous history of the patient and in the army the opinions of his comrades may serve to enlighten. In some cases, however, previous moral character will not be altogether reliable, as men of most unexceptional conduct have imposed on Army Surgeons. Searching the beds and pockets will sometimes reveal the irritating substance that produces an obstinate ulcer; and if an accomplice is suspected, perfect isolation will reveal all you want—the cause and the cure; and a thorough chemical test or microscopic examination of foreign matter alleged to be discharged, should be made.

I have thrown these thoughts and compilations together with the hope some aid may thereby be given to a class of over-worked and neglected men now in our army, who are subjected to more imposition and mortification, more expected from them, and less remuneration, than any other human being. I mean Army Surgeons; and will have succeeded if I have aided even *one* in his responsible and heavy duties.

SELECTED.

CAUSES OF FAILURE IN THE TREATMENT OF THE UTERINE ULCER.

By ROBERT ELLIS, ESQ.,

Obstetric Surgeon so the Chelsea and Belgrave Dispensary.

A considerable acquaintance with the treatment of the uterine ulcer has forced upon me the conviction that, notwithstanding all that has been done in the elucidation of this disease (or rather class of diseases), the subject is still very imperfectly understood. However unlikely this may appear, the statement admits of sufficient corroboration, and may be supported by abundant testimony. The articles which have already appeared in *The Lancet* on the varieties of the uterine ulcer were in a special manner intended by me to set this subject in a practical light, and to show the advantages of careful diagnosis as conducive to success in treatment. Because of the failures of others, and out of an inquiry into the causes of my own, those articles were prepared, and the importance of a strictly discriminative treatment was sought to be enforced. As a practical summary of the proper treatment of this or any other disease may be gathered from an investigation into the causes of a frequent ill-success, I venture to append the present to the former papers, and it is not improbable it may be found to be the most useful of the number. I will first show, by one out of many cases which have come under my notice, that there is a need for this investigation, and then enumerate the commoner causes of unsuccessful treatment.

Mrs. C. L——, aged thirty, married nine years, applied for advice under the following circumstances. She had been for three years under the care of a physician for uterine disease, and in the course of that time had been cauterized with nitrate of silver upwards of *one hundred times*. At the expiration of this period, thinking her case desperate, and having been told by her attendant that she still remained uncured, she submitted her case to me. She complained of great weakness, pain in the back, bearing down, and constant brownish discharge. She had experienced one or two bad confinements and one or two miscarriages with great hemorrhage. She was pale and

worn in expression of countenance, and dejected as to her future prospects of health. Examination disclosed a large ulcer, of the character I have designated "fungous"—an ulcer, on an atheromatous basis, occupying both lips of the cervix uteri, and reaching high up the canal. What effect the large number of cauterizations she endured might have had on this ulcer I could not perceive. Possibly it might have been large formerly; but I think more probably it was a little if at all altered by the applications made to it. It had been treated by means of a small cylindrical glass speculum, and so mildly that on no single occasion was pain ever experienced by the patient. The cause of failure in this case in all probability lay, first in the imperfect diagnosis of the character of the ulcer, and secondly in the most inefficient and imperfect means adopted for its treatment. It was a pleasure to tell this suffering lady that in a few weeks the whole mischief would be removed and her disease cured.* It might not be easy to find a more conspicuous example of failure in treatment than that here presented, but it is by no means difficult to adduce many similar instances. Cases are constantly coming under notice which in many of their features present the parallel of this.

The principal causes of failure in treatment may be found under the following heads:

1st. *Errors of Diagnosis.*—I believe this to be one of the most constant reasons for the ill success and the slow progress of treatment in numbers of cases presented to our consideration. I have known the malignant ulcer—true cancer of the cervix—mistaken for the simple sore, and treated with escharotics, to the sad detriment of the patient. The simple ulcer has also frequently been mistaken for the cancerous, and the sufferers left unaided to struggle with a painful and depressing yet an easy curable disease. The "indolent" ulcer has been treated as the "inflamed," and the patient put to bed for five or six weeks, during which she has been repeatedly leeched. The "diphtheritic" ulcer is not so easily to be mistaken; yet it is liable to be, and has been, confounded with the "inflamed;" and it is a serious mistake for the patient if it be treated with some kinds of escharotics. The "fungous" ulcer may also (as in the case already quoted) be so trifled with—as if it were

* One or two resolute applications of the stronger caustics, followed by a thorough penetration of the canal by the lunar caustic, have verified this statement, and the patient is at this present writing nearly well.

a simple and easily curable sore—as to baffle the surgeon and wear out the patient. Of the importance of a right diagnosis in syphilitic ulcer of the cervix—a disease happily very rare—it is unnecessary to speak. There is little real difficulty in coming to a correct diagnosis as to these various forms of uterine ulcer; and if the reader will refer back to the five articles preceding this, and examine the characteristic evidence of each phase of the legitimate reward of care in diagnosis, it may be hoped that the cause of failure now treated of will be diminished in frequency as these diseases are more carefully investigated.

2nd. *Errors of Treatment.*—Of this, probably, all surgeons must be found more or less guilty. Since the instrumental treatment of uterine ulceration is of the present day, we could not but suffer for a time from the want of previous experience and a sound basis of knowledge. But these errors are no longer justifiable; and, the differing forms of uterine disease being well understood, true principles of cure may be laid down. The application of leeches to a fungous, diphtheritic, senile, indolent, malignant, or specific ulcer, is a mistake which no one ought to make—yet it is frequently made. On the other hand, the administration of wine or high-class tonics—quinine, iron, and strychnia—is a not less serious mistake, if we are treating the inflamed ulcer. The selection of an inappropriate escharotic is also an error of no little moment—the nitrate of silver to the senile, diphtheritic or malignant ulcer. In some of these cases but little harm may be done; but in nearly all, little or no good will ensue; and in one or two, positive mischief may be the result. A reliance on injections for the cure of any form of uterine ulcer is a most common and therefore a very serious error in treatment. The wife of an officer in the army has just applied to me, who for two years had strong injections of alum and sulphate of zinc administered to her daily, for an indolent ulcer of the cervix, and it has continued unaltered in spite of this treatment;—it is probably worse than it was. I have observed therefore with great regret the introduction of the system of frequent irrigation as a means of cure in these diseases. Disappointment will certainly follow a dependence on such means.

3rd. *Inefficiency of the Means Employed.*—It might seem impossible to look at the inflamed, hypertrophied, ulcerated, pussecreting structures of the diseased uterine cervix, without at the same time being impressed with the fact that no trivial agent would suffice to effect its restoration to a healthy state.

Elsewhere in the human body such an ulcer would be pretty sure to receive the firm and uncompromising attention of the surgeon. It is certainly a disease not to be cured—not, at least, soundly cured—by any agents the action of which is merely superficial. What is required is, to substitute healthy for diseased action; and the most rapid method of doing this is cauterization by the stronger escharotics. Even in the use of these a distinction is to be drawn. Potassa fusa is applicable for the melting down of a stony hypertrophy. The acid nitrate of mercury has a caustic and also an alterative action, and is applicable to certain states of the inflamed ulcer. The strong nitric acid, saturated with nitrate of silver, is fit for the treatment of the fungous ulcer, being both a powerful escharotic and an astringent. For milder cases, the nitrate of silver, very firmly applied, and allowed to lie for some seconds on the part affected, is useful. These agents have a real power over the cure of these diseases, by the side of which a medicated injection counts for but little. Yet there may be an inefficient use even of these means, powerful though they are. Neglect to remove the ropy discharges will go far to neutralize the action of any one of them—and there is no neglect more common. Neglect of applying the escharotic sufficiently high up the canal is a most frequent cause of failure. Several cases have occurred to me in which the failure of cure has its origin solely in this neglect, the disease apparently lurking high in the canal, and creeping down after the lapse of a certain time. The constant danger of fracture in using the cylinder of nitrate of silver has often led to its very inefficient employment. To obviate this I have for many years made use of an instrument in which I have passed a platinum pin, through a hollow cylinder of the caustic, and thus rendered it impossible to be broken off.† It is thus possible, were it to be desired, to pass the stick of caustic beyond the os internum, and to ensure its safe return. A too frequent cauterization is also a frequent cause of failure coming under this category, and it is particularly observable in obstetric practice at public institutions, at which the attendance of the patients is not so systematic as in private practice. The result is very frequently that the cure is always commencing and never progressing. But, in the long run, the only evil arising out of this is the great prolongation of the time of cure. A most important and common cause of inefficient treatment is to be found in

† This instrument has been well made for me by Mr. Coxer.

the use of imperfect instruments. Of the caustic-holder I have already spoken. The right form of speculum is not of less moment. I believe the failure of treatment in the case placed at the commencement of this article to be in the main traceable to the use of a cylindrical speculum exclusively. The only purpose for which this form of speculum is valuable is in the application of the fluid escharotics, which, but for its protection, are apt to run down and do mischief. It cannot be too strongly insisted upon, that a speculum, to be of real use, must be capable of opening out the lips of the cervix, as by this means alone can the canal be thoroughly cauterized.

4. *Neglect of accessory means* constitutes another very common cause of failure. Particularly, would I refer to the neglect of daily injections. The instruments formerly universally recommended for this purpose to sufferers from uterine disease, and still in very general use, are amongst the most barbarous and inefficient that can be conceived. The glass female syringe I have extracted in jagged fragments from the person of one of my patients who had recourse to it, and had broken it in the canal. The syringe of Gooch, and all others similar to it, are loathsome, and as likely to do harm as good. The clean and elegant instrument known as the uterine douche fulfils every purpose for injection, and a steady use of it (in the unimpregnated state) is a powerful aid to the cure of uterine disease. A due attention to the laws of hygiene is not less important; and, most of all, the securing an effectual state of rest—mechanical and, as far as may be, of physiological rest also. With regard to the use of medicines, it is just possible that here a little neglect may be really wholesome, for the patient has too often been put through all the formularies, and is weary of taking medicine in vain. The state of the bowels, and of the digestive functions, may not, however, be disregarded. It is, of course, perfectly probable that, notwithstanding all neglect of accessories, the patient will still be cured, if she be well managed in other respects. But this is to be remembered—that her cure will be longer, will be more painful, and is less safe than under a more perfect system.

5. *Imperfect cure* of the ulcer is a constant source of failure to the obstetric surgeon. After a few cauterizations the sore takes on such an improved look that he may think further attention unnecessary. The patient derives a certain amount of temporary good, and is satisfied; but the lapse of a year, often of less, will test the soundness of his work, and he will

find to his annoyance that the whole malady has to be treated over again. The condition of the structure below the ulcer was overlooked in his estimate of the cure, and as the cauterization was not deep enough to modify that, the disease returned. Much pains, patience and time are really indispensable to the solid cure of the disease; and it is only a loss of all if the surgeon hurry his case to a premature close. It must also not be forgotten that the ulcer may be lurking high in the cervical canal, and amongst the folds of the arbor vitæ. A thorough cure will generally be a permanent cure.

The following table may prove useful as an appendage to this article, and exhibits the varieties of the ulcers of the cervix uteri in their order of frequency, with their diagnostic characters and appropriate treatment:

VARIETIES.	CHARACTERS.	TREATMENT.
1. *Indolent Ulcer.*	Cervix hypertrophied, of a pale pink and hard. Os patulous to a small extent. Ulcer of a rose-red. Granulations large, flat, insensitive, and the edge of the ulcer sharply defined. Discharge: mucous, with a little pus, and occasionally a drop of blood.	For a few times the caustic pencil. Afterwards, several applications of solution of nitrate of silver in strongest nitric acid.
2. *Inflamed Ulcer.*	Cervix tender, hard, a little hypertrophied, hot and red. Vagina hot and tender. Ulcer of a vivid red. Granulations small and bleeding. A vivid red border around the ulcer. Discharge: a muco-pus, yellow and viscid, with frequently a drop of bright blood entangled in it.	Occasional leeching; hip-bath (warm); emollient injections. Then acid nitrate of mercury several times, succeeded by the solid lunar caustic potassa fusa or cum calce.
3. *Fungous Ulcer.*	Cervix soft, spongy to the touch. Os wide open, so as to admit the finger. Ulcer large, pale, studded with large and friable granulations. Discharge: a glairy, brownish mucus, frequently deep tinged with blood.	At first the caustic pencil. Subsequently nit. acid solution of nitrate of silver, or acid nitrate of mercury; electric or actual cautery.
4. *Senile Ulcer.*	Cervix small, red, a little hard. Ulcer small, extremely sensitive, of a bright red color. Granulations very small, extremely sensitive, of a bright red color. Discharge: a thin muco-pus.	Potassa fusa, or strong nitric acid with nitrate of silver, once or twice, at *long intervals*. Then, solid sulphate of copper in a pencil.
5. *Diphtheritic Ulcer.*	Cervix of ordinary size: a little hot, dry, and tender. Ulcer covered with patches with a white membrane, adhering closely; irritable, and readily bleeding beneath. Discharge: a thin, acrid mucus without pus, but occasionally tinged with blood.	At first electric cautery, potassa cum calce, or acid nitrate of mercury, two or three times, at long intervals, *No nitrate of silver* Subsequently, stimulant applications—tincture of iodine or sulphate of copper.

I may be allowed in conclusion, to express my conviction that the more carefully these varieties of the uterine ulcer are studied, the greater will be found the practical value of their diagnosis, and the fewer of the instances of failure in their treatment.—*London Lancet.*

The Turkish Bath in the Treatment of Insanity.—Dr. Power, resident physician of the Cork Lunatic Asylum, in a speech delivered on the occasion of the presentation of an address and testimonial to Dr. Bartes, on April 23, 1862, recommended in highly eulogistic terms a trial of the Turkish bath in the treatment of the insane. Speaking of his own experience of its effects he said: "Of course, out of more than 500 patients in the Institution all were not expected to recover, nor were they all under treatment for the purpose; but the best way of showing the effects of the bath would be by statistics. It was only fair to conclude that if the proportion of cures had been greater since the introduction of the Turkish bath than before it, this bath must have had some influence in producing that desirable result. I see by my notes that for the year ending March, 1861, the cures were 59 per cent.; but for the nine months ending 31st December last, during which period the bath has been in use, the per centage of cures was 76—that is, 74 had been cured out of 96 entered. That was more than double the number of cures produced in any asylum in England. The patients, after the first few baths, all seemed to be much pleased with it, and were always longing for the time when it was to be administered. Those who had suffered a relapse, after being sent out cured, showed no unwillingness to return to the Asylum; and even asked to be taken there at once, in order that they might get the bath, as they considered that nothing else would cure them. I have never seen any ill effects from the bath, except a little nausea and a slight fainting in a few instances, but after a bath or two those effects disappeared. Up to that time I have used it on more than 900 cases, and since March, 1861, 30 idiotic patients have been removed to a higher class, and rendered capable of enjoyment and of doing work about the establishment. I would recommend the introduction of the Turkish bath into all public Institutions, and I am firmly convinced that it has as beneficial an influence on the system as air and exercise."—*Medical Times and Gazette.*

ON REPRODUCTION OF TENDONS

WHOSE DIVIDED ENDS HAVE SEPARATED OVER FOUR INCHES.

By DR. COOPER.

The curious and very interesting process of reproduction of tendons whose divided extremities have separated several inches,is just beginning to be watched by members of the medical profession with peculiar interest. In times gone by, two inches was fixed upon as the maximum distance in which a separation of the ends of a divided tendon could take place and reproduction occur. Now we regard the matter differently, and boldly cut through contracted tissue, whether it be tendon, ligament or muscle, and restore the deformed part to its proper position, even if the margins of the wound separate five or six inches, having the utmost confidence in the reparation of the proper tissues, whenever the patient's system is in a condition favorable to recovery from any wound whatever.

But in order to secure the reproduction of the same substance to fill the space previously occupied by tendon, it is necessary that the process of granulation be established. Thus, in dividing the tendon of Achilles, if the contraction of the parts were so great as to cause a separation of the divided ends three or four inches, it would not do to resort to the subcutaneous section, and afterwards apply a bandage around the limb, by which the surfaces covering the space occupied by the tendon are pressed together, because an early union would take place, and thereby prevent the reproduction of tendon. It is necessary, in that case, to cut down through the skin to as great an extent as the ends of the divided tendon are disposed to separate, and, after the operation, fill the space thus made with lint, so that it must heal throughout by granulation. This is the only method upon which perfect reliance can be placed for the reproduction of tendinous substance in the place where it has been removed to any considerable extent. By this method, the old rule of never permitting the ends of a divided tendon to separate from each other more than two inches, becomes, as it should be, obsolete.

When this is the case, and surgeons, throughout the world, no longer regard the admission of atmosphere into the tissues of the extremities as a sort of danger, orthopœdic surgery will make advances never before known or dreamed of.

The question will be, in the progress of surgery, when operating for deformities of the hands or feet—What blood-vessels and nerves, likely to be involved in the operation upon the tissues, must be divided to a sufficient extent to admit of an easy removal of the deformity?

To be more definite, surgeons, when operating for talipes varus, in cases where there is extensive true fibrous degeneration, involving a great amount of tissue, will not hesitate to cut down into the anterior part of the sole of the foot, when the plantar arterial branches have become small, and divide the entire tissues, if requisite, to the bony structure, even if it should become necessary to invade some of the metatarso-phalangial joints, or of the tarso-metatarsal articulations. In the latter operation, it may become necessary, in some instances, to ligate the internal plantar artery, but, if so, it will be no particular impediment to the success of the operation.

Our mode of operating for clubfoot is, to divide a sufficient amount of contracted tissue to insure a removal of the deformity, let that be great or small. We have frequently cut down through the sole of the foot, directly to the bony structure, in cases of clubfoot, and invariably with the best of results. Under ten years old, no case of clubfoot is incurable, if the surgeon's practice be guided by the above principles.

We wish this statement to be taken as absolute, because no case of clubfoot, in early life, is beyond the reach of surgery. Of course, we do not wish to be understood to say, that a feeble state of health may not prevent success in these cases, because that may be a barrier to the success of any treatment, and in any kind of case. But we mean to say, that, ordinarily, cases of clubfoot are curable, without the least regard to the extent of deformity, and though we occasionally failed, in former times, in consequence of being guided, more or less, by the old rules of surgical writers, we have never done so on this coast, and do not expect to do so, unless unavoidably interrupted in the process of treatment.

Many persons may be inclined to the opinion that this extensive section of contracted tissue is an unnecessarily severe operation. To this we answer, *first*, that success and safety will vindicate any operation, and, *second*, that it is a very mild method, compared with the torturing plan of curing the deformity by the application of tightly fitting apparatus. The latter keeps the patient in pain for weeks, or even months, whereas the former only for a few moments, when the painful period is over forever.—*San Francisco Medical Press.*

SMALL POX.

Just at this moment, when the characters and relations of ovine variola are affording the material for much speculation and thought, it will be particularly interesting to our readers to lay before them the subjoined documents recently submitted to us respecting the early history of vaccination as practiced by Jenner, and its relation to the variolous disease in animals.

The first is a narrative forwarded to us by Mr. Thomas Watts, of Frampton-on-Severn, Gloucestershire, and extracted from the manuscripts of his grandfather, Mr. John Webb, of Wick, Gloucestershire, dated September, 1799. It affords an additional evidence of the knowledge of the protective power of the cow-pox existing amongst the farming people of that valley before Jenner, of Berkeley, made it known to the world, and worked out the great results with which all are familiar.

I.—NARRATIVE OF MR. JOHN WEBB.

"Some time in the month of May, 1792, having twenty-four children collected together at a house in Doynton for the purpose of being inoculated, and a Betty Bowman, then aged eighty, accidentally coming in, she was asked by another woman present whether she had ever had the small-pox; to which E. B. replied in the negative, asserting, with a considerable degree of confidence, that she was certain she never should, having in her younger days caught the cow-pox from a cow that was infected by a man in the small-pox. Such an opinion naturally induced me to desire from her a more particular account of the circumstance, when I was informed that when she was twenty-three or twenty-four years old she lived in the service of a farmer, on whose estate, at a distance from the farm-house or any other habitation, there was a small cottage, together with some cowsheds; that the cottage was let to a (probably one of his laborers), who dying in the small-pox betwixt Michaelmas and Christmas, the bed and bed-mat on which he had lain were thrown out into the sheds; that a cow belonging to their dairy, being, as she termed very chilly, frequently went into the cowshed, and had been observed to lie down on or near the bed and mat; that shortly after the same

cow was seized with the cow-pox, and the whole dairy, consisting of nine cows, sickened one after the other, till at length the milk was so bad that it could not be used, and of course the cows were suffered to go dry, till which time she constantly assisted in milking them; that soon after she was seized with rigors and pain in her limbs, had a tumour form in the right leg and axilla, and that three pustules appeared on the hand near the thumb, from which there was a discharge for some time (she believed about nine days); that (as before mentioned) she neither prior nor subsequent to that period had the small-pox, though she had frequently visited persons ill in it, and once in particular lay on a bed on which a person had died in that disease, the bedclothes only being changed. She likewise observed, that two or three persons who had had the small-pox were frequently among the cows, but received no infection. She likewise informed me, that she knew a Mary Hathaway, who milked infected cows at one time, and was not infected by them, but that at another time she was; that she likewise never had the small-pox prior or subsequent to that period, though she resided several years in Bristol."

The second is an interesting record relating to Mr. Benjamin Jesty, described as having been the first known person who introduced cow-pox by inoculation, at a date twenty two years prior to Jenner's first experiment. For this narrative we are indebted to Mr. Alfred Haviland, Surgeon to the Bridgwater Infirmary:

II.—THE PROTO-MARTYR TO VACCINATION.

"As a matter of medical history, I send you the following facts, which may prove interesting to your readers.

"At the Rose and Crown Inn, Nether Stoway, co. Somerset, my attention was drawn, on the 21st of May last, to a photograph taken from a larger portrait of a good specimen of the fine old English yeoman, dressed in knee breeches, extensive double-breasted waist coat, and no small amount of broadcloth. He was represented sitting in an easy chair, under the shelter of some wide-spreading tree, with his stick and broad-brimmed hat in his left hand; his ample frame was surmounted by a remarkably good head, with a countenance which at once betokened firmness and superior intelligence.

"I have been thus particular in describing the portrait, for I am not quite certain whether the photograph was taken from a drawing, an engraving, or an oil-painting; if, however, the source was an engraving, in all probability there are some

copies still extant, which the curious in such matters may think worth collecting.

"On the back of this photograph is a copy of the epitaph on our subject, as follows:

"Sacred to the memory of Benjamin Jesty, who departed this life on the 16th April, 1816, aged seventy-nine years. He was born at Yatminster, in this country; and was an upright, honest man,—*particularly noticed for having been the first person (known) who introduced cow-pox by inoculation; and who, from his great strength of mind, made an experiment from the cow on his wife and two sons in the year* 1774. (From the tomb in the churchyard at Yatminster, Dorset.)"

"I am informed by his relative, Mrs. William May (*nee* Jesty) that when the fact became known that he had vaccinated his wife and sons, his friends and neighbors, who hitherto had looked up to him with respect on account of his superior intelligence and honorable character, began to regard him as an inhuman brute, who could dare to practice experiments upon his family, the sequel of which would be, as they thought, their metamorphosis into horned beasts. Consequently the worthy farmer was hooted at, reviled, and pelted whenever he attended the markets in his neighborhood. He remained, however, undaunted, and never failed from this cause to attend to his duties; and the secret of this bold conduct may be traced in his determined chin and nose and firm lips. After living to see another enriched and immortalized for carrying out the same principles for which he had been stoned thirty years before, he died of apoplexy, like Jenner, in 1816. Jesty's experiment on his family was performed in 1774; and Jenner's on the 14th of May, 1796, just *twenty-two years later*."

VEGETARIANISM.

Those who are impatient of the bold repetition of old and refuted follies; who are angry with the apostles of an error who for ever preach as truths the rankest nonsense, the most worn-out fallacies, and the most childish gossip,—will have read with a feeble stir of indignation and contempt the reports of a recent meeting of the "Vegetarian Society." It is difficult to conceive a more condensed series of absurdities, errors, and misstatements than has been produced by the clever reduction into bare sentences of the opinions broached, for the

purpose of abridged report in the public journals. The absurdities of the proceedings are most cleverly presented. Vegetarianism has not flourished because, while men are engaged in studying the means of destroying each other without compunction, it is not likely that they will systematically consider the life of cows, sheep and, such low animals. It is true that such Brahminical reverence does not greatly influence our feeding at present; and if any religious arguments are to be drawn from the Bible, they assuredly are far from discountenancing the consumption of animal food, since lists of lawful food are there given: while the observation of the ordained manner of living of that large class of creatures which are destined to prey upon the vegetable-feeding animals affords a natural-history precedent. The boldness with which all the convincing series of facts is ignored is characteristic of this most absurd of systems. One speaker is described as saying, "Animals fed upon vegetable products; and all the nutriment combined in the flesh of these animals was derived from that source. Why, then, should men obtain nutriment at second hand, alloyed by the impurities of the animals through which it had passed?" As though all animals feed upon vegetable food? The notion of describing butcher's meat as second-hand cabbage and potatoes alloyed with animal impurities, is an exquisite specimen of physiology for the people. If this speaker will observe the grinding teeth, the triple stomachs, the chewing propensities, the complicated structure and enormous length of the digestive intestinal canal in vegetable-feeding animals, and the single stomach, cutting teeth, and simple intestinal apparatus of man, he will appreciate the anatomical reasons which have determined the flesh-eating propensities of our race. Perhaps there is not any one of our habits or natural instincts of which the cause is so clearly apparent in the elements of our structure, of which the religious approbation is more deeply founded, or of which the utility is more logically evident. Of the personal experiences related at this meeting we need not say anything; leaving the illness of the gentleman who suffered "jaundice as the consequence of chill after a plentiful meal off cheese-curds" to the special interpretation of the pathologists of his school.

But why is this school of nonsense called "Vegetarianism" at all? The name is a mockery. The diet which these enthusiasts adopt is more animal than that of half the meat-eaters; and it has been calculated by no less competent an authority than Dr. Carpenter, that in adopting the rules in a

well-known "vegetarian" diet-book the quantity of eggs, milk, and butter consumed would give half an ounce more animal matter daily in the diet than in that of ordinary families. These gentlemen have, then, a great objection to second-hand grass alloyed with animal impurity in the form of flesh, but not in the form of milk and eggs. It must be a source of wonder that, spite of the inexhaustible folly and oneseideness of mankind, a delusion so transparent as this should exist even in small proportions.

It is hardly consolatory, although in some sense satisfactory, to know that a heresy exists in the opposite direction, and that in a work published not long since in Liverpool the author announces his conviction that the human race is essentially intended to be carnivorous; and incidentally mentions in the course of his argument that he is on the lookout for a lady of similar convictions, who will unite her fortunes with his, and adopt his diet, with the view of bringing up a family of carnivorians. Horribly suggestive is the notion of the possible development of such a family, if the Darwinian hypothesis be well grounded. What might be the specific changes earnest from such an application of the principles of election to the origin of species it is hard to say; but this is a rival absurdity to "vegetarianism" which may amusingly serve to antagonize it.

EARLY MARRIAGES.

Those earnest and practical moralists who, having seen a source of national enfeeblement and degradation in the gradually widening proportions of the social evil, have essayed to check it, point justly to early marriages as one remedy. In a valuable article on the Midnight Mission, *The Times* returns to this important subject. Public opinion needs to be turned in this direction; and if some share of the attention be bestowed on it by earlier legislators and philosophers were now once more aroused, a step would be taken towards healing this cancer of our civilization. Aristotle, in the eighth book of his "Politics," elaborately discusses the question of age, and fixes the term in which statesmen should enjoin and beyond which they should forbid marriage. Eighteen he names as the fit age of the female, and twenty-seven for the male sex. In Rome, vicious and debased as it was, the *lex Poppæa* prohibited from marriage men of sixty and women of

fifty. On the other hand, precocious unions were discouraged among the Lacedæmonians and other nations of antiquity. Physiologically, the age for marriage of the male may be fixed at from twenty-two to twenty-five, and from seventeen to twenty one of the female. "Children born too late are orphans too early," says the Spanish proverb; but it must be added that they do not survive in due proportions to verify that unpleasant prediction. Nor is anything more miscalculated than the sort of *equilibration* which is sometimes essayed by the union of age and exhaustion on the one side with youth and vigor on the other. The results are exactly opposite to those which we may suppose to be sought, and a puny and vitiated offspring proclaim the ignorant infraction of one of Nature's first laws. There is no compensation to be obtained in this manner. The early years of fashionable profligacy which now form the usual novitiate of the prosperous classes threaten an undoubted degeneration of our race. Of late years an open toleration has been extended to these habits, of which the bad effects are already widely apparent to medical observers. The evil spreads and becomes more pressing.

"Ætas perantum pejor avis tulit
Nos nequiores mox daturos
Progeniem vitiosiorem."

This toleration may at least be revoked; something may be done to make the paths of vice less flowery, and to facilitate those early and happy unions which offer so many moral and physical advantages.—*London Lancet.*

[The subjoined came to hand too late for insertion in its proper place.—Ed.]

Madison, Ind., Sept. 4th, 1862.

Messrs. Editors:—Dear Sirs: Having noticed the different operations of Dr. R. R. Browne, reported in the August number of your valuable journal, I find that he is at a loss to know what to use for the removal of maggots from the wounds of our brave soldiers. I would suggest the use of Turpentine. I have used it repeatedly in my practice without ever failing. It also cleanses the parts of all dead matter, and seems to produce a healthy action and heals more readily than anything I have ever tried. I have also used Honey. It is not as certain as the Turpentine. W. J. Conner, M. D.

EDITORIAL AND MISCELLANEOUS.

Twentieth Session of Rush Medical College.—The Introductory exercises of this Institution took place according to the Announcement on Wednesday evening, Oct. 1st. The lower lecture room of the College building was filled to overflowing by students and friends of the School. Each chair was represented on the platform, Dr. Brainard presiding, and the Rev. D. C. Locke, Rector of Grace Church, acting as Chaplain.

Owing to the unexpected detention of Prof. R. L. Rea, then acting as fleet surgeon on the Mississippi, the Annual Introductory Address expected from him was given by Dr. Allen. As it is published, by request of the class, we forbear any comments upon it in this place. We barely suggest the editorial regret that Prof. Rea had not occupied the hour and our pages—for whatever that gentleman undertakes always savors strongly of the sound and right—even when he lashes a mulish Brigadier.

An unexpectedly large class is in attendance, and, without any disparagement to previous classes, we must be permitted to say it is one of which any College might well be proud. Many of them are preparing for the position of surgeons and assistants in the army. This, under the circumstances, is peculiarly gratifying. It is well known that the present "Examining Board" of applicants for surgeoncies in the army is made up from the faculty of what is called the "Med. Dep. of Lind University," and it is notorious that the interests of the soldiery and of the commonwealth have throughout their entire term of service been held immediately subordinate to those of the *secession school.* The idea has been assiduously inculcated that to pass the Examining Board it is incumbent on students first to make friends with the individuals of that Board by attending the skeleton college, which they are vainly attempting to prevent from the usual fate of mortality. A

few weak medical infants have succumbed to this "pressure," but, we are happy to state, but a small fraction of the number in attendance upon "Old Rush." The secession dodge has again failed.

We congratulate the alumni of the College in that, at least, *one hundred and fifty* are now in attendance upon the annual lectures.

The College Cliniques.—The semi-weekly Cliniques of the Rush Med. Coll., attended by Profs. Brainard and Allen, are largely supported by patients. In no way has the advantage of this great central city of the Northwest for clinical instruction been so remarkably exemplified as in this immediately practical part of the instruction in the College. It suffices to say that the number in attendance has been so great as often to render it impossible to bring all the cases before the class in the hours devoted to that purpose. Patients, both surgical and medical are attended every day at the College, and public clinics take place semi-weekly. The City Hospital, under the immediate supervision of Profs. Freer and Ingals, also affords a good field for practical observation and study. We can confidently assure the profession that this great desideratum in medical teaching is rapidly taking a place in Chicago which will be surpassed by scarcely any other city in the country.

Return of Dr. Holmes.—We are pleased to meet again upon the street the face of our genial friend and correspondent, Dr. E. S. Holmes. (For a glimpse of the particulars, see p. 467 of this volume.) Another of the Dr.'s letters appears in the present number, and others will be given from time to time.

Prescriptions.—Great care is requisite in writing prescriptions that they may be appropriately adapted to the age, etc., of the patient. The following left to the family "to be sug-

gested" to the attending physician for a patient, *fifteen months old* only, seems eminently Malthusian: ℞. Hyd. Cum Creta ʒj, Pulv. Opii gr. j, Pulv. Camph. gr. iv., Pulv. Doveri gr. x. M. In chart, No. iv. S. Give one every three hours. The attending physician failed to see the propriety of giving the infant a half grain of opium and a gr. of camphor, at all events quite so often.——In a case of Puerperal Convulsions, recently, a medical man of large power of secession discourse, prescribed: ℞ Calomel gr. x, Morph. Sulph. gr. ij. M. In chart. vj. divid. S. One every hour. So great was his confidence in the combination that he refused any further attendance or treatment—insisting that if that did not cure nothing would. From the result—it seems "nothing would." ——In another case the same gentleman having diagnosed tumor of the posterior wall of the uterus—a state of things he remarked, which he had "never before seen in so young a woman"—prescribed *Liquor Potassæ*, confidently assuring the patient that he "could cure her in three or four years." A few weeks after, he was sent for in great haste, and found that a miscarriage had just taken place—thus establishing a new influence of Liquor Potassæ, well worth bearing in mind. The objurgations of the patient and family, it is reported, were particularly enlivening to the bystanders. The tumor has wholly disappeared. The family physician had previously diagnosed pregnancy.——We saw recently a prescription consisting essentially of Morph., Hyoscy, and Syr. Scillæ Comp., amounting to a pint, to be given in teaspoonful doses, which both the "Dr." and the druggist (probably in silent partnership) asserted could not be put up in less amount. The large cost of the mixture announced by the druggist staggered the patient, who incontinently retreated, and afterwards our friends Buck & Rayner put up one-fourth of the amount at a fair sum. The profession and all honorable druggists owe it to themselves to discountenance such imposition. The one given is but a sample from scores which have been given to us. We shall recur to the subject again.

Woman before the Examining Board.—A woman lately applied for examination to enter the Med. Dep. of the army to the Examining Board. Strangely enough they decline the honor. Our friend, Dr. R—g—s, says that he was fairly nonplussed the other night, in passing the catheter to relieve the bladder of a six foot masculine, whilst a buxom lass of twenty summers held the candle—but we suppose necessity knows no law.

Vesico-Vaginal Fistula.—Prof. DeLaskie Miller has within the last few weeks operated on three cases of this distressing lesion, in each case with a successful result. He has promised us a full report in an early number of the JOURNAL.

Wheeler & Wilson—the advertisement of whose incomparable Sewing Machine appears on the cover of the JOURNAL—have removed their establishment to new and magnificent quarters, at 106 Lake street. It is well worth the while of all visitors of the city to look in at their superb store. We question whether in beauty, adaptation, or a certain *je ne sais quoi* of refined elegance, its superior can be found on the continent. It is a capital exponent of the *recherche* taste and culture of the gentlemanly superintendent, Geo. R. Chittenden, Esq., who originated both the general design and the minor appointments of the edifice.

The W. & W. Machine took the highest premium at the recent World's Fair in London—an honor richly deserved.

Death of Dr. E. S. Cooper, of San Francisco.—The telegraph brings the melancholy intelligence of the death of this gentleman, well known to our readers as a former resident of this State, and as a voluminous contributor to surgical literature. No particulars of his illness have as yet been received.

CHLORIDE OF LIME is well known as one of the very best remedies for wounds and sores, where there is a want of healthy action or a tendency to gangrene; also for deep burns, etc. It is generally used by mixing with cream or the fixed oils in the proportion of about one to ten of oil; but its volatile nature has prevented its use in any preparation ready to be applied. This difficulty is now obviated in the following preparation:

Take any of the resins of proper consistence, or Rosin and a volatile oil; Spts. Turpentine or Petroleum in such proportion as to make a wax that may be worked with the fingers; mix thoroughly with from five to ten per cent of Chloride of Lime, previously moistened by one-third of its weight of water. The whole enters into chemical combination, forming a nice adhesive paste, soothing, stimulating and affording perfect protection to the parts. It is prepared for the trade under the name of "Magic Healer." A preparation in market called "Rapid Healing Balsam" is made from the same formula.

L. J. GILDERSLEEVE.

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ORIGINAL COMMUNICATIONS.

CASES OF VESICO-VAGINAL FISTULA.

By DE LASKIE MILLER, M. D.,
Prof. of Obstetrics in Rush Medical College.

Case 1st.—Vesico-Vaginal Fistula—Following Protracted Labor—Spontaneous recovery.

Mrs. H., aged about 33 years, of large frame and strong muscular development, had about three years previously given birth to a still-born child, after a tedious labor. Was taken with labor pains about 2 o'clock A. M. Saturday, and by direction of the midwife in attendance, she exerted herself to the utmost, from the first pains, to increase, by voluntary efforts, the efficiency of the uterine contractions, till Monday evening following, when from physical exhaustion the progress of labor was suspended.

At this time, by a vaginal examination, I found the os uteri dilated; the head engaged in the superior strait, in the first position; the vagina hot, dry and tender; the urine had not been voided for many hours The distended bladder was relieved by the catheter. The forceps were applied without great difficulty, and after a little while the child was delivered still-born.

At first the only unfavorable symptom was a partial paralysis of motion and sensation in the right inferior extremity. The bladder was evacuated by the catheter, and the bowels moved with Ol. Ricini on the second day. The lochia continued in the usual quantity, but offensive.

On the 8th day after delivery the patient complained of inability to retain her urine, and an examination, made by passing a silver catheter into the bladder and a finger into the vagina, revealed a fistula nearly the size of a ten cent piece, opening into the bladder at the upper end of the trigone.

Treatment.—The bowels were kept soluble by the use of saline laxatives. The catheter was allowed to remain in the bladder a considerable portion of the time. The vagina was syringed frequently with tepid water. Electro-magnetism and stimulating frictions were applied to the paralysed limb. After about two weeks the fistula appeared to have contracted sensibly; sensation and power began to return in the limb; and in about six weeks more the urine passed only by the urethra, and the patient was enabled to walk without assistance. The improvement in the limb continued until the patient perfectly recovered.

The result in this case impressed me most forcibly with the importance of assiduous attention, in recent cases of accidents of this kind, and of the probability of recovery by the constant use of a properly constructed catheter, and frequent use of vaginal and vesical injections of water, or with the addition of some suitable astringent.

Case 2nd.—Mrs. A., from an adjoining State, the mother of two children—the youngest about seven years of age—arrived in this city Sept. 20th.

The history of her case, as obtained from herself, was, briefly: That about five weeks previously she was taken in labor; that after suffering about seven days under the care of her physician, who had administered ergot freely, she secured the services of another physician, who delivered her, with instruments, of a large still-born child. A few days after her

delivery, she experienced inability to retain her urine, which flowed continuously. The physician last in attendance examined and found a vesico-vaginal fistula, situated high up in the vagina; and by his advice the patient visited this city to obtain relief.

Having evacuated the bowels freely with Ol. Ricini on Sunday, I performed the operation Monday A. M., assisted by Profs. Brainard and Ingals, Drs. Lynn and Gore, and Mr. G. B. Cloud, medical student. The patient was placed in the prone position, leaning over the edge of a table, the hips elevated above the shoulders by pillows properly placed, and chloroform administered. The edges of the fistula were then carefully dissected so as to denude the entire thickness from the vaginal to the vesical mucous membrane. Three stitches of silver wire were then introduced, with the precaution of not including any portion of the vesical mucous membrane. No little difficulty was experienced in passing the needles through the upper border, for the fistula encroached very closely upon the neck of the uterus. The shield was then brought into requisition, it having been previously prepared from thin sheet lead, of a size somewhat larger than the fistula and oval in shape, measuring about $1\frac{1}{4}$ inches by $\frac{3}{4}$ of an inch, and perforated with six small holes, about $\frac{1}{4}$ of an inch apart, and arranged in two rows, separated about 1-16 of an inch. The wires were then passed through these holes while the plate was still external to the vulva. The plate was then carried up to the fistula and sufficient traction made to bring the edges together. The wires were then twisted close to the shield and cut off. A catheter was introduced into the bladder, the patient placed on her back in bed, and 2 grs. of Pulv. Opium administered. This was repeated three times in the succeeding thirty-six hours. The diet consisted principally of nutritious broths and beef tea. The vagina and bladder were washed by daily injections of cool water. Very little pain or irritation of any kind followed the operation. The bowels were not evacuated until the eighth day.

On the 9th day the stitches were taken out and the shield removed. The fistula was completely closed. The catheter was retained in the bladder several days longer, and the patient remained about a week after discontinuing the use of the instrument, and then returned to her home perfectly well.

Case 3rd. Still under treatment.—Mrs. C. was delivered of her first child about six months since. After suffering in labor more than a week, instruments were used, and the child was still-born. By her account the fistula existed from the time of delivery, for she represents that she was unable to control the escape of urine thereafter.

The operation, which I performed one week since, did not differ in any essential particular from that described in the second case. No unfavorable symptom has occurred. The shield has not yet been removed, but, from appearances, the case promises to terminate favorably.

RUPTURE OF THE UTERUS—CÆSAREAN OPERATION—DEATH IN SEVEN DAYS.

Reported by L. R. HOLMEAD, M. D., Chicago.

Was called upon by Mr. B., Sunday, July 20, at 11 A. M., to see his wife in labor with her fifth child. On my arrival, found that she had been having pains since early in the evening previous. A midwife was in attendance. The pains said to have been slight until 3 A. M., when they became quite severe, and so continued until 9 A. M., when they ceased suddenly, the patient exclaiming, "What was that gave way?" and complaining of great distress in the abdomen.

All her former labors had been severe and prolonged. Upon examination, found the following condition: Pulse, 85 and full; nausea and retching, but no vomiting; no labor pains, but continued abdominal distress; head of child resting

on floor of perineum. In fifteen or twenty minutes after my arrival, the pulse began to flag and vomiting commenced, but the latter was readily allayed by Opium. Fearing the nature of the trouble, I requested counsel, which, after some opposition on the part of the family, was acceded to. My friend, Dr. David Dodge, arrived at 12 M., and he agreeing with me, the family requested the further counsel of Dr. N. S. Davis, who came in at 2 P. M. He agreed with us in the propriety of instant removal of the child, although not decided as to nature of the trouble. The patient's pulse 120, and the head had receded slightly. Prof. Davis attempted to apply the forceps, but the child immediately receded. Upon examination it was found to have passed through the rupture, except the head and one arm. He then attempted to turn, but could not introduce his hand through the opening. Prof. Byford was then sent for, with request that he should come prepared to perform the Cæsarean operation. 4 P. M.—Patient growing more feeble; pulse 140.

4:30.—Prof. B. arrived. The Cæsarean operation decided upon and performed by him. Placenta and child both found in the peritoneal cavity; removed and wound closed in the usual manner with needles. 5:30.—Gave ½ gr. Sulph. Morph. and directed ¼ gr. to be repeated every hour during the night. 7:30 P. M.—Quiet, and seems to be getting under the influence of the narcotic. 8 o'clock.—Prof. B. called; pulse 130, weak. 10:30.—Sleeping; pulse same; skin moist.

21st, 2 P. M.—Continues in about same condition. Commenced giving Brandy ℥ ss every hour. 4 A. M.—About the same. 6 A. M.—Begins to be narcotized; pulse and skin in same condition. 8 A. M.—Prof. B. called; pulse rather more full; otherwise no change; brandy suspended. 12 M.—Abdominal muscles begin to relax; abdomen slightly tympanitic. 2 P. M.—Prof. B. again present; pulse more frequent; tympanitis increasing; feels weaker. Morphine continued. Tr. Veratrum Viride gtt iv.

6 P. M.—Apparently sinkiug; pulse 150; very weak. Exhihited Morph. Sulph. and two drops Verat. Virid.

7 P. M.—Seems to be sinking rapidly. 8 P. M.—If any change, slight improvement. Prof. B. again present; ordered Turpentine gtt. iv., with Tinct. Opi gtt. x. in emulsion, every hour.

10 P. M.—Pulse getting more volume. 12.—Continued improvement. Comes out from under influence of opiates. Pulse 130, full. Complains of tenderness in the abdomen.

July 22nd.—Continued apparent improvement when examined at 2, 4 and 6 A. M. At 8 o'clock, Drs. Byford and Dodge came in; condition good; pulse 112. At 2 P. M., begins to give way again; nausea; pulse 130, and weaker. Discontinued Turpentine on account of the nausea; Morphine and Verat. Virid. continued. 8 P. M.—Had been rather more comfortable during the afternoon. At 11 P. M., tympanites began to diminish.

July 23d.—Has passed considerable gas with relief. The wound looks healthier this morning and traces of pus.

2 P. M.—Passed the morning comfortably; pulse not quite so good; tympaniets increasing. Ordered Quinine 3 grs. every four hours. Attempt to pass a rectum tube, but it will not go by the uterus. When removed, the orifice was found clogged with fæces. 6 P. M.—Considerable company has been permitted by the family. Patient is restless; tympanits increasing. Morph. gr. ss.

12 M.—Great excitement. Pulse 150, pretty full; abdomen enormously distended. Drs. Dodge and Byford present. Ordered injection Warm Water ℥ vj; Castor Oil ʒ ij; Turpertine ʒ j. M. Which moves off a large amount of gas, but no fæcal matter. This gave much relief, and the pulse lessened in frequency.

July 24th, 8 A. M.—Tympanites subsiding; has passed gas freely. Essence of beef ℥ ss, every two hours.

2 P. M.—Pulse 130; wound looking well. 8 P. M.—Has been sleeping quietly; tympanitis less.

July 25th.—Afterpains when the wound is dressed. 12 M. Spontaneous and free movement of the bowels; pulse somewhat excited. 2 P. M.—Pulse 130; no sleep. 8.—Symptoms of suppuration. Essence of beef ℥j, every two hours. No further movement of the bowels. After-pains becoming regular; discharged one clot; lochia free; no sleep. *Left parotid somawhat tumefied.*

July 26th, 8 A. M.—Not as well; had a bad night; the bowels had moved once; pulse 140. Swelling of the left parotid region increasing. Ordered: ℞. Comp. Tinct. Cinchonæ ℥j; Quiniæ Sulph. gr. j; Acid. Sulph. Aromat. gtt. v. M. To be given every two hours. Needles removed from the wound, which is looking badly. Adhesive plaster substituted.

2 P. M.—Worse. Diarrhœa. Ordered Tinct. Opi ℥j at once, and ℥ss every two hours; Tinct. Cantharides gtt. xl; but, on account of the difficulty of swallowing, the patient did not take it until four o'clock. 6 P. M.—Pulse fuller, 130; can swallow more readily. 10 P. M.—Pulse failing; parotid increasing in size; painted it with Tinct. Iodini; bowels still moving too freely, and wound looks badly.

July 27th, 8 A. M.—More feeble; diarrhœa continues. Continue treatment.

10 A. M.—No pulse at the wrist; cold to the elbows. Brandy *ad lib.* 11 o'clock.—Pulse returns; hands warm. 12 as at 11. 2½ P. M.—Sinking. At 6 P. M., in my absence, she was seized with convulsions. Drs. Byford and Dodge exhibit Chloroform, with relief. From this time she sunk rapidly. At 8, the spasms recurred; Chloroform produces vomiting, and death occurred at 9 o'clock P. M., being over seven days from the operation.

The single but pregnant comment upon this case is that, although it ultimately resulted fatally, nevertheless it contains within itself ample evidence that the formidable operation involved is warranted as a dernier resort in instances of this terrible accident.

REMARKABLE CASE OF RETENTION OF THE PLACENTA.

By J. DRAKE HARPER, M. D., Springfield, Ills.

Mrs. B. gave birth to a fœtus of four months, on the 4th inst., late in the evening. I was sent for to remove the Placenta. On arriving, I found the cord had been ruptured within the os uteri, by a lady who was in attendance. I found the patient comfortable; no flooding; no after pains; pulse regular. On making an examination per vaginam I found the mouth of the womb almost entirely closed—not able to introduce the end of the index finger.

I gave her wine of Ergot, one drachm every half hour for six or eight hours. At the same time, directed warm water injections per the rectum and vagina, and cloths dipped in hot water to be applied over the hypogastric region.

On the morning of the 5th I called to see her. The remedies having effected nothing, I ordered a hip bath and a large dose of Castor Oil. After the oil had been taken a few hours I directed injections to be used again.

The evening of the same day I called again, finding my patient comfortable, oil having operated thoroughly; no flooding; no after pains; skin moist; pulse soft and regular. I made an examination per vaginam; the condition of the womb the same as at the former examination. The discharge from the vagina was of a sanious, watery nature, entirely void of smell.

That night I gave her three portions of Pulv. Doveri and small portions of Morphine, and Flax Seed Tea, to be used several times through the night.

On visiting my patient the following morning, she stated that she had had quite a good night's rest, perspired freely, and expressed herself as feeling able to get up and go to work.

This morning the indications were to let nature do its work, directing the use of Pennyroyal and Flax Seed tea occasionally through the day, and the use of warm water and milk injections, per vaginam, twice a day.

Believing "Conservative Medicine" to be safer than a "Meddlesome Midwife" in such cases, I directed the use of warm teas, and injections to be continued. I visited her regularly every day, until the evening of the tenth day after abortion. This evening I found her not so well; considerable fever; pulse 90; bowels same; tympanitis; slight tenderness over the region of the womb. Made an examination per vaginam. The mouth of the womb was still contracted, and hotter than natural, producing some pain in raising the womb upon the tip of the finger. Seeing interference became absolutely necessary to save my patient, I directed the use of a hip bath, injections to move the bowels, and hot fomentations to be applied over the abdomen. I also used a small quantity of Extract of Belladonna to the os tinceæ; and gave her—Doveri, grs. xxx; Sub. Mur. Hyd, grs. x; to be divided into four parts, one to be given every four hours, and Turpentine emulsion between the powders.

The next day at 12 o'clock M., I delivered the Placenta. She flooded a great deal before I arrived. Found the afterbirth hanging in the os uteri. On examination of the uterine surface of the Placenta it presented all the appearances of one recently expelled after the birth of a fœtus. There was no decomposition, hence there was no odor. The patient has entirely recovered.

A CASE.

By L. B. BROWN, M. D., Iroquois, Ills.

MESSRS. EDITORS OF THE CHICAGO MED. JOURNAL:

I was called in July, 1861, to see a lad about thirteen years old, with fractured *Clavicle*. The accident occurred some two

or three days previous to my visit, and had been treated by a "physician" living in town. The case, so far as the fracture alone was concerned, presented nothing unusual, but the manner in which it was dressed, and, particularly the operation to be performed by the attendant, (who was momentarily expected,) was astonishing to me as related by the mother of the patient.

The mountebank, after making use of all means known to him (except heroic) whereby fractures are to be adjusted, declared that it was necessary to make an incision through the skin, and introduce a hook in order to raise the rebellious portion of the clavicle. It was in consequence of this declaration of the quack that I was called.

After disengaging the patient from an almost inextricable application of compresses and bandages which were sewed at every accessible point, and seemed applied for the double purpose of *securing the patient* and keeping him warm, I applied the common figure of 8 bandage, with pad in the axilla, and sling. A cure was completed in five or six weeks without difficulty.

Question—Is it advisable to report such cases?

CLINICAL INSTRUCTION IN THE HOSPITAL OF VIENNA.

By E. L. HOLMES, M. D., of Chicago.

I intended to give a description of the Clinics in the Hospital at Vienna before leaving that city. I was unable to do this, and now take the first opportunity since my return to Chicago of fulfilling my promise.

Students from the United States, who visit the European Hospitals, are usually most interested in the clinical lectures, and probably such lectures are of more practical importance

than any others. I have stated some of the reasons why I consider the Clinical Instruction of Vienna to be superior to that of other cities for those students who wish to fit themselves for the practice of *general medicine and surgery.* Any one who intended to pursue a specialty would undoubtedly do well to visit the clinics of every large city. The same is also true of general medicine, when the student has ample means and sufficient time, with a knowledge of different languages. In other cities, celebrated for their clinical lectures, there are the following inconveniencies, which I have learned by my own experience and that of others: The clinics in all the hospitals and in the wards of the same hospital are given at the same hour of the day—usually between eight o'clock and ten in the morning. Little effort seems to me to be made to give the student full advantage of the valuable material collected in these hospitals. This is too much the case in many of our American hospitals. It is difficult to see why, in large cities with fine hospitals, the clinics of each hospital and of each ward should not be given, as far as possible, at different hours of the day, that the student may have the opportunity of hearing as many clinical lectures as he may desire.

In this regard the Vienna hospital is far superior. Early in the morning are two clinics in general medicine, followed by those of surgery. After these, at separate hours, are the lectures at the bed side on diseases of the eye, skin, syphilis, obstetrics, and in the "dead house" on pathology.

In addition to the public clinics, the student finds every facility for taking private instruction in the diagnosis, treatment and pathology of the diseases of nearly every organ in the system. In this way the student is enabled to gain the greatest amount of practical knowledge in the shortest time. The lectures themselves compare very favorably with those of any hospital in the world.

One of the most populhr clinical lecturers in Vienna is Prof. Oppolzer. One can scarcely conceive a more practical plan of imparting medical knowledge than that adopted by

this distinguished lecturer. Gifted with great fluency of speech and possessing a wonderful degree of erudition in everything pertaining to the past and present history of medical literature, united with an immense experience in the observation and treatment of disease and in public instruction, he is able to make his lectures interesting and of the greatest good to his listeners. Not only students, but old practitioners testify by their continued presence to the great merit of these lectures.

Every patient, as soon as he enters the wards of the lecturer, is assigned to the care of a student, whose duty it is to make a careful examination of the symptoms and keep a record of the case as long as it remains in the hospital; at the clinic the professor questions the student in presence of the class in everything pertaining to the case, calling the attention of all to every important point and comparing it with other similar cases in the ward. At the same time the secretions are carefully examined by means of the microscope and test tube.

The clinics are usually about an hour and a half long and are given six days in the week.

The clinics of Prof. Scoda are also worthy of notice. Although he is much less fluent and generally considered less interesting in his manner than Prof. Oppolzer, his lectures are none the less instructive. They are principally upon diseases of the chest. There are a sufficient number of patients and ample opportunity for every student to examine each patient for himself. Private courses of instruction in auscultation and percussion are given by Professor Scoda's assistant.

These clinics are followed by those of Professors Schuh and Dumreicher in the surgical wards. The general plan of instruction is the same as above described. Everything relating to operations, to the diagnosis and treatment of injuries and surgical diseases is carefully taught, with cases enough to illustrate every important point. I should infer, after con-

siderable observation, that injuries requiring surgical treatment, especially fractures, were rare in Vienna as compared with our own large cities.

The clinical lectures in obstetrics are particularly important to the American student, who has little opportunity of receiving clinical instruction in this branch of his profession in America.

There are upon the average, I think, eight births a day in the hospital. The patients are delivered in a room assigned for the purpose, and then carried to the wards, where they remain nine days, or until they are able to leave. The class is carefully instructed in the mode of making examinations per vaginam, and of learning the position of the fœtal head and body during labor. The whole process of parturition is thus learned by repeated observation. There are also private courses on the use of instruments and "turning," the cadaver, from which the viscera have been removed, serving the purpose of a manikin. A dead fœtus is placed in different positions in the pelvis, which the students are to examine in turn and give their diagnosis. After this the operation of turning or the application of forceps is made and the fœtus delivered. When the student has taken this course on the application of instruments, he is permitted to use them when necessary on the living subject in the lying-in wards. One thus has an opportunity of watching several hundred cases of labor, of having a small number under his own care and of learning practically the use of instruments; he is also taught the duties of the lying-in room in reference to the mother and infant during the nine days subsequent to delivery.

The clinics of Prof. Hebra on diseases of the skin are one of the most popular courses in the hospital. In his wards are nearly two hundred and fifty patients, and with this large number of cases he is able to illustrate all the important points in the commencement and progress of every form of skin disease. The wards are open to the students, but Prof. Hebra usually delivers his lectures in a small amphitheatre,

the patients being brought before the class. After he has called the attention of the class to the points worthy of notice in each case, the patient passes from one patient to another, thus enabling each to examine him more closely. The male patients are wholly naked at the clinics; the females being dressed in loose garments, to permit a ready examination of any part of the body. These clinics are given five days in the week.

The lectures of Prof. Sigmund on syphilis are very popular. There are two or three hundred cases in his wards. A careful examination of these, in connection with the lectures of the Professor, will make the student more familiar with this disease than he can be after years of reading and observation in private practice.

Students interested in diseases of the eye will find the clinics of Professors Arlt and Jaeger interesting and instructive. In these wards are about two hundred patients. The student has ample opportunity of acquiring a knowledge of the use of the ophthalmoscope, of witnessing a large number of operations and of acquiring skill in the diagnosis of opthalmic disease.

In addition to the ordinary clinics as above described there are private courses of instruction in the clinical study of every class of disease, including treatment, operative and medical. These courses are scarcely less beneficial to the student than the others, as they give him an opportunity of reviewing what he has alreany learned from the different Professors.

I cannot close this short notice of the Clinics of Vienna without alluding to the facilities given the student for the study of pathology. There are upon the average five post-mortem examinations a day, at which students can be present, notice always being given when a patient dies, of the hour when the autopsy will be made. Generally, however, the students prefer to be present at the lectures of Prof. Rokitansky, at which all the morbid specimens of diseased organsf collected each day, are exhibited. The private course o

Rokitansky's assistant is very useful, since he not only demonstrates all the fresh specimens, but visits the great Pathological Museum, for which Rokitansky has so long labored, and explains all the preparations, illustrating the effects of the disease of each organ.

The Pathological Museum may justly be regarded with pride by the Medical School of Vienna. The building is a large fire-proof structure of stone and brick, erected at a cost, as I was informed, of $40,000. The Museum is a large hall, tastefully fitted and ornamented. The other portions of the building are used for the reception of the dead previous to burial, for dissections, for the ordinary post-mortem examination of the hospital, and for the examination of cases of sudden or violent death in the city. Each Professor has a private room for the examination of his own cases. Whatever may be said of the advantages offered by other cities for the study of surgery or medicine, I think no city can claim for its hospitals better facilities for the study of pathology than can be found in Vienna.

I trust I have been understood in what I have said regarding the superiority of the Medical School of Vienna. I have given my reasons based not only on my own experience, but especially on that of many other medical men from nearly every country of the world who have visited every large city of Europe.

SELECTED.

DIPHTHERIA.

EXTRACT PROCEEDINGS PHILADELPHIA COUNTY MEDICAL SOCIETY.

Jas. M. Corse, M. D., Chairman Com.

During the past year this disease has prevailed amongst us, and has, in quite a number of instances, proved fatal in spite of the medical means employed for its cure. In many of its features it closely resembles other diseases, while a few of its symptoms and its sometimes intractable character, have distinguished it from them and placed it in the light of a new disease. Its protean character has given rise to difference of opinion in medical circles, as to whether it is a variety or complication of known diseases, or an entirely new scourge. In the present state of learning, we are unable to determinately settle the question, and must prescribe for it according to the phenomena observed in each case.

History shows us that long since, even as far back as 1576, a disease of a fatal character was noticed, which was characterized by many of the symptoms of diphtheria, and later writers are willing to consider it the same as the one which now prevails so extensively.

Dr. Wittig writes he "has met with a number of cases of diphtheria, of which only two were fatal; a false membrane was formed like that in croup, which passed down into the larynx; the febrile symptoms were milder, but the suffering greater than in croup.

"The disease occurred sometimes in conjunction with scarlatina and sometimes independently. I did not employ blisters because I have known them in croup to produce a slough. Aq. chlorinata; tr. ferri chlor. and nit. arg. and sulph. cupri were applied to the fauces.

"In one of my fatal cases the urgent symptoms subsided a few hours before death, and the patient became conscious; notwithstanding I gave wine whey, beef tea, and quinine, the patient continued to sink, and at last expired."

Dr. Atkinson says diphtheria has in common with scarlatina every premonitory symptom; when fully developed, everything except the rash, and leaves precisely similar sequelæ,

and finally, that "it would require stronger arguments and more observation of well-marked cases to convince him that these two names do not rightfully belong to one affection." Dr. Maris, Resident Physisian to the Philadelphia Dispensary, says of diphtheria, "I am disposed to believe it may be induced by the poison of scarlatina, but that the diseases are identical I am not convinced. My plan of treatment consisted in the use of chlorate of potash, tr. ferri chlor., wine whey, beef tea, &c.; locally, gargle of dilute chlorinated soda, cupri, alum, &c."

Dr. Hamilton writes of diphtheria that "the symptoms are in some cases so similar to what we see in some cases of scarlatina and in croup, as lead to confusion and difficulty in diagnosis. Other cases were so decided and peculiar in feature, as to admit little doubt of their non-identity with scarlatina or croup."

Dr. Henry Hartshorne says: "My conviction of the non-identity of diphtheria with scarlatina, and of the pathological importance of the diagnosis between it and croup, has been strengthened by every case I have seen.

"This disease is one of the greatest importance in all respects, but more particularly from its extensive prevalence and fatality."

In reply to our circular, Dr. Condie has given a concise summary, which contains most of what may be said on the subject, and coming from one of his ripe experience and happy power of description, we deem it best to give his remarks on the subject entire.

Dr. Condie reports that, "compared with 1859, the past year, 1860, may, with propriety, be pronounced as a decidedly unhealthy one, throughout nearly every portion of the United States. It has been marked, certainly by the prevalence of more and severer disease, and a far greater amount of mortality than the year preceding.

"Various forms of catarrhal, bronchial and pneumonic diseases, were constantly met with during the spring, as well as during the latter portion of the summer, and from then throughout the autumn and winter up to the present time.

"During a portion of the year measles, chicken-pox, and a very malignant form of scarlatina prevailed, in different sections of the city, as somewhat extended epidemics. In certain neighborhoods a large number of cases of erysipelas and small-pox, with some of hooping cough, and many of child-bed fever. To this list of prevailing diseases must be added

pseudo-membraneous angina or diphtheria. All of these still continue to show themselves to a greater or less extent, in many portions of the city.

"From the very commencement of 1859, diseases of the fauces and of the respiratory organs, varying much in intensity, were observed to occur more frequently than during preceding years. More especially was this the case in respect to inflammatory affections of the throat in persons of ages and conditions in life. Most of the cases which first occurred, were of simple sore throat—slight redness (with very little or no tumefaction) of the tonsils, of the palate, uvula, and often of the whole posterior portion of the pharynx, without, however, any diphtheric deposition, or ulceration. There was usually a sense of heat and dryness of the throat, some increase of soreness in swallowing, and a short, hacking, but not very frequent cough. These cases were attended with more or less, but never very intense or long continued, constitutional disturbance. They readily yielded to a very simple treatment, and seldom lasted beyond two or three days.

"Towards the close of spring, and during the damp and changeable weather of the summer, many cases were seen in which the affection of tonsils, palate and pharynx; greater intumescence of the mucous membrane--some difficulty in swallowing, and with the appearance, for the most part, upon the tonsils, and posterior and upper portion of the pharynx of very small patches of a dirty white, yellowish, or brownish exudation, very nearly circular in form, and with tolerably sharp and well defined edges. Sometimes the congested mucous membrane rising up around these patches, would give them the appearance of being depressed, as though the deposit was the bottom of a small ulcer. These cases were, like the former, in general, readily controlled, and usually terminated favorably at the end of four or five days, or at the furthest a week.

"Cases of genuine well-warked diphtheria became now extremely common in some sections of the city. The disease, however, as it presented itself in different patients, varied much in the intensity of the symptoms. In the simplest and mildest form it commenced without any very marked symptoms. The patient would occasionally complain of a sense of soreness, or of prickling about the fauces, with a slight degree of pain, extending along the Eustachian tube into the ear—some stiffness about the neck—dryness of the throat, a slight, dry cough, and more or less thirst. The tonsils were gener-

ally swollen, while the entire mucous membrane of the fauces was reddened, exhibiting considerable injection of its superficial vessels; the surface, at the same time, being uniformly covered with a thin, transparent, shining pellicle. The latter occasionally increased soon in density, so as to become opaque and acquire a whitish or yellowish hue. When this pellicle was detached the mucous membrane beneath was found to be without ulceration or abrasion. The tongue, particularly from about its centre towards its base, was more or less thickly indued with a dirty-white granular looking fur. By the fauces there was secreted a thick, tenacious, ropy fluid, not readily ejected from the mouth.

"This form of the disease was attended with but little danger, and seldom lasted, if it were properly managed, beyond a few days. Three-fourths of the cases seen by me were entirely well at the end of six or eight days. Occasionally, however, the case would suddenly assume, usually in its early stage, a much more severe and dangerous aspect—even acquiring, within a very short period, the most malignant features of the disease.

"In other cases, again, the attack was preceded for several days by a sense of languor and lassitude. Chills and flushes of heat would rapidly succeed each other. There would soon set in pain of the head, redness and suffusion of the eyes, stiffness and soreness of the neck, with intumescence and tenderness of the cervical glands. Pains extending into one or other of both ears, or frequently down the back and along the lower extremities were of common occurrence. There was always some difficulty of deglutition, which in severe cases was often so great as to cause, when an attempt was made to swallow fluids, a portion of these to be returned through the nose. The surface was hot and dry, the urine scanty and high-colored; often turbid and ropy. The bowels were mostly regular—though occasionally constipated. The appetite in some cases was entirely absent, while in others it was variable, or but slightly affected. Occasionally there was pain of the epigastrium, with nausea and vomiting, at intervals, of a glairy fluid tinged with bile; now and then every minute albuminated flocculi were seen floating in it.

"In some cases the attack was ushered in with a decided chill, succeeded by severe fever, which lasted usually about forty-eight hours, but, in many instances, it continued throughout the disease. For the most part, however, the febrile action was but slight. It was always more or less decidedly remit-

tent, and often assumed from the onset a stronly marked adynamic type. In this more evidently febrile form of diphtheria, the throat, very early in the attack, became hot and sore. Deglutition, and, indeed, every movement of the muscles of the throat was attended with pain. The tongue was narrow and pointed, and thickly coated with a dirty white or yellowish pasty matter, through which the enlarged papilla were seen to protrude, in the form of red, shining points. The deposition upon the faucial mucous membrane was from an early period of the attack abundant and of a membraneous appearance.

"Its color was dirty white, yellowish or grayish. It usually commenced in small, distinct patches, which rapidly extended in size, and finally coalesced, so that soon the throat presented scarcely a single portion which was not uniformly coated. Sometimes the deposition took place simultaneously over nearly the whole of the throat. When it was separated from the faucial mucous membrane, the latter was found intact—or slightly reddened: occasionally, there was seen to ooze from its surface a blood serum, or even a drop or two of pure blood.

"In the great majority, if not in all the cases observed by me, the deposit in the throat was repeatedly thrown off and again renewed. In favorable cases it became thinner upon each renewal, until it ceased entirely to be formed.

"Even when the membraniform deposit was confined strictly to the tonsils, the palate or the pharynx, there was often observed some change in the tone, volume, and clearness of the patient's voice. There was, however, very little, if any, disturbance of respiration, so long as the deposit did not extend into the larynx. When, however, such extension occurred, the breathing became invariably difficult and stridulous, and there set in a loud ringing cough, as in croup; while the voice became low, whispering, or extinct.

"In a few cases there took place, even before any symptoms of severe illness became manifest, a rapid and most extensive deposit throughout every portion of the fauces, pharynx, and larynx, followed promptly by death from suffocation, as in the more acute form of membranous croup.

"In its more severe forms, the disease was apt to linger for ten or fifteen days, or even longer, with occasional changes, apparently for the better, but of short duration, the patient gradually sinking into a state of hopeless exhaustion. An attack of bronchitis of the most unmanageable form would

not unfrequently occur, sometimes early in the attack. Pneumonia has, also, been observed, running a rapidly fatal course. It has happened, now and then, that after apparently the most complete convalescence had set in, a relapse would most unexpectedly ensue, followed shortly by a fatal termination. Even in severe cases of diphtheria—under what seemed at first sight the most unpromising circumstances—the disease after running a more protracted course—fluctuating for many days between better and worse—has been known eventually, under judicious management, to terminate favorably.

"Diphtheria assumed occasionally a form of very decided malignancy. The attack commenced in one or other of the manners above recited. Very early, however, indications of adynamia, of a more or less decided character, made their appearance. The strength of the patient became greatly depressed—there was a livid, dusky appearance of the countenance, and an acrid heat with great dryness of the surface. The entire throat presented, from the first, a thick coating of pultaceous, ash colored matter, which soon became of a dark brownish, and, finally, decidedly black hue, and exhaled a gangrenous odor. A fetid sanious fluid, of more or less consistence, was discharged from the nostrils. The cervical glands became greatly swollen, and often the whole of the anterior portion of the throat also, the integuments of which became tense and shining, and of a dusky red or mahogany color. In such cases, I have known suppuration to ensue, the matter being infiltrated throughout the cellular tissue of the parts affected, causing extensive sloughing, laying bare in a few instances the parotid glands, the trachea, and the large bloodvessels of the neck. The disease has been seen to extend from the throat in the posterior nares, involving in destruction all the soft parts from the roof of the pharynx, including the soft palate, to the base of the brain. In this malignant form of diphtheria the prognosis is always unfavorable—recovery from it being rather the exception than the rule.

"In all the forms of the disease an eruption upon the skin is liable to occur. It has been supposed to be confined chiefly to the more intense grades of the disease; I have observed it, however, as often in the mildest cases as in the most malignant. The eruption is sometimes slight and evanescent, but occasionally it is more generally diffused—of a more decided appearance, and continuing for several days. In these cases the eruption bears a close resemblance to that of measles—

inclinig to a very deep raspberry hue. In some instances, it was, however, the appearance simply of a slight efflorescence or scarlet rash—whenever this is the case we have found it to be very evanescent—or to come and go at short intervals throughout the entire continuance of the disease. This eruption cannot be said to be a very common accompaniment of diphtheria. In some of the epidemics of which we have the history, no mention is made of any eruption upon the skin having been observed; while in others it is described as constituting one of the prominent features of the disease. It is probable, however, that in many of these cases there was a combination of diphtheria with scarlet fever—both of which diseases have very generally prevailed in the same localities at one and the same time. This fact has been noticed in this country as well as in Europe.

"As sequelæ of diphtheria, I have observed abscess of the tonsils, parotids, and other glands of the throat and neck. Inflammation of one or both ears, followed by suppuration and a long-continued fetid discharge; a similar discharge from the nostrils is also liable to follow attacks of diphtheria. The discharge from the nose as well as that from the ear very generally caused a severe irritation of the parts over which it was allowed to flow. In some instances the attack of diphtheria was followed by a short, dry, obstinate, hacking cough —hoarseness—with loss of the natural tone and compass of voice—in a few cases with a total extinction of the voice. In other cases the sequelæ were chronic diarrhœa, intumescence of the face and extremities, sometimes of the entire body. In nearly every severe case convalescence was long and tedious, and the patient was liable throughout it to the occurrence of severe attacks of bronchitis or pneumonia, or even to die suddenly, after any unusual exertion, apparently, from mere exhaustion.

"Albuminuria was by no means a common occurrence in the cases of diphtheria, which have fallen under our notice, certainly in not more than one fourth. When it did occur, it made its appearance early in the attack. Its presence or absence did not appear to bear any relation to the severity or mildness of the attack, or to render the prognosis more unfavorable. The albuminous urine, even when most marked and profuse, would occasionally be found entirely free from tubal casts. Unlike what occurs in scarlatina, albumen has very seldom been detected in the urine during convalescence, never, unless it had been previously present.

"In by far the larger number of instances, which have fallen under my observation, the persons attacked with diphtheria were infants, and children under fifteen years of age. Occasionally, however, the disease was encountered in older patients—chiefly, within the range of my observation, females. The youngest patient with diphtheria treated by me was turned of two years—the oldest, a female, forty years of age.

"Diphtheria is evidently the product of some peculiar morbific condition of atmosphere, either confined to certain limited districts or, as usually takes place, spreading successively from district to district. Notwithstanding its epidemic features—its general disregard of the topographical character and the sanitary condition of the places visited by it—of the character and amount of their populations, or the season of the year, diphtheria has nevertheless been found to prevail most extensively, and with the greatest severity in low, damp, confined, unventilated, and otherwise unhealthy situations; during seasons marked by great and sudden vicissitudes of temperature, in conjunction with excessive atmospheric moisture, and among a crowded, squalid, badly-fed population, the members of which are regardless of personal and domestic cleanliness. I have not met with a single fact that would lead me to suspect that diphtheria is susceptible of being propagated by contagion. Whenever I have been able to investigate properly the circumstances which have been adduced in evidence of the contagious character of the disease, I have invariably found them to be simply cases in which the diphtheria has successively made its appearance in individuals who had visited or who were residents of a location in which it was at the time prevailing, and who, in consequence, were equally exposed to the same malaria, the same epidemic cause by which the disease was generated in those previously attacked, and from whom it was supposed to be contracted by those who sickened subsequently. In all these instances it was most certain that in those who took the disease it was generated by a common atmospheric cause, which, we admit, was more active in certain localities than in others within the sphere of the epidemic influence, from the want of due ventilation, overcrowding and other unfavorable hygienic condi tions.

"As to the true pathological character of diphtheria: the common opinion formerly entertained that it is a specific inflammation of the mucous membrane of the throat, giving rise to a peculiar pellicular exudation upon the surface of the

affected membrane without destruction of its integrity, will scarcely find any supporters at the present day. The entire history of the disease, its symptoms, progress and results, would seem to indicate its evident dependence upon some morbid condition of the general system—most probably arising from some abnormal condition of the blood. This view of its pathology seems to me to constitute the only true and safe basis for a rational and successful therapeutics. Whoever shall attempt the treatment of diphtheria, in its more severe forms at least, by remedies directed solely to the throat affection, will meet certainly with disappointment—a judicious and well managed constitutional treatment will alone be crowned with success. The efforts of the physician must be directed mainly to the restoration of the healthy condition of the blood—not, however, overlooking entirely the diseased condition of the throat. The removal of the membraniform deposit from the fauces, or the prevention of its accumulation and extension is always to be attended to. It is a measure calculated to give great relief to the patient, and will concur with the general treatment in rendering his recovery more prompt and certain.

"By some few writers on the disease diphtheria is set down as a mere form of scarlatina, unattended, for the most part, by the eruption on the surface. It is very certain that there is a very close affinity existing between diphtheria and scarlet fever, and, also, we believe it will be found, between it and epidemic erysipelas. All three of these diseases are liable to prevail together epidemically, in the same localities. They are all zymoses—their local and more prominent symptoms being all subordinate and secondary to a general morbid condition of the system. It is well known that diphtheritic deposition often occur in the throats of patients affected with scarlet fever, and we have seen that an eruption upon the skin is at least an occasional occurrence in connection with diphtheria; it is this, perhaps, which has led to the opinion that there is a perfect identity between the two diseases. We are convinced, however, that their diagnosis can always be very readily made out.

"During the past year, up to the present period, during the epidemic prevalence of diphtheria, the same thing has been observed as was observed in most—nearly all—of the former epidemics of the disease, that, namely, in conjunction with it, both scarlatina and erysipelas prevailed in the same neighborhoods, often in the same house. Cases of erysipelas, especial-

ly, have certainly fallen under our notice during the last eighteen months, more frequently and of a more severe and unmanageable character, than during the same length of time at any former period of our practice.

"In the treatment of the disease, so far at least as it fell under my notice, in the cases met with by me, I have been governed solely by the indications present in each case. In a few instances, where the disease occurred in young, robust, and plethoric habits, and was attended by decided febrile reaction and a hard or resisting, quick pulse, I have directed at the very onset of the attack, a moderate abstraction of blood by leeches applied to the neck in the neighborhood of the tonsils, and I am persuaded, with the very best results. In the majority of cases, however, direct depletion was strongly contra-indicated, and a tonic, cordial, and stimulant treatment demanded. My usual remedies were the tinct. of the muriate of iron, quinine, wine whey, milk punch, or even pure wine, or brandy and water, in doses, the size and repetition of which being adapted to the age of the patient and the urgency of the symptoms of adynamia present in each case. I have employed, and I believe with much advantage, the chloride of soda, by the stomach, and, locally, as a wash to the throat. The chlorinated mixture recommended by Dr. Watson, in his Lectures, as a remedy in scarlatina, has in my hands, also, proved decidedly beneficial. In many instances when the patient is seen early in the attack, some advise an emetic of sulphate of zinc to be given; we have seen, we think, much good result from the practice. The remedy with the effects of which I have been the most pleased, has been a combination of calomel, muriate of ammonia, ipecac. and extract of hyoscyamus—from 1 to 3 grains of the first, 2 to 4 grains of the second, $\frac{1}{4}$ to $\frac{1}{2}$ a grain of the third, and from $\frac{1}{4}$ to $\frac{1}{2}$ or even one grain of the fourth article, for a dose. To be repeated every two, three, or four hours. The dose, as well as the intervals of its repetition, to be regulated according to the age of the patient, the stage of the disease, and the urgency of the symptoms present.

"At the very commencement of the attack, when the diphtheritic deposit is small in amount, and confined chiefly to the anterior portion of the fauces, it is probable that a judicious application to the throat of nitrate of silver may have the effect of so modifying the morbid condition of the part as to prevent the extension of the disease and any very severe affection of the pharynx or larynx. As a general thing, how

ever, I have not found the free and repeated use of the nitrate of silver, nor, indeed, of any of the caustic and stimulating applications to the throat so commonly prescribed in diphtheria to be productive of any decided good. In mild cases these applications have appeared to me to do positive harm, while in the more violent they do good, to say the least of them. In some instances, the application to the throat of the tincture of the muriate of iron, largely diluted with water, two or three times a day, or oftener, by means of a swab or brush, has appeared to me to be attended with beneficial results. I may make a similar remark in reference to a wash for the throat of diluted pyroligneous acid, or diluted hydrochloric acid and honey, or a strong solution of alum and honey. Gargles of a strong infusion of sage, rendered rough with alum and sweetened with honey—a saturated solution of borax and honey, or a solution of chloride of soda, one pint to sixteen of water, will often be found decidedly beneficial.

"Care should always be taken to supply the patient, at short, stated intervals, with good beef tea, chicken broth, new milk, cream, plain egg custard, oyster liquor with crumbs of cracker broken in it. The patient will often refuse to take food from, apparently, an inability, or perhaps a fear to swallow; by perseverance, however, and proper management he may, in general, be induced to take properly prepared nutriment up to even an advanced stage of the disease. During convalescence the diet should be improved as rapidly as possible, by the addition of the more easily digested meats, plainly cooked; with such vegetables as will be least liable to disturb the stomach or bowels.

"Cold water, as a means of quieting thirst, should be allowed, as well during the disease as during convalescence. It is peculiarly grateful to the patient, and a soothing application to the throat. Ice cream will often be taken, and has always appeared to me to do good by its coldness, and its lubricating properties, independently of the nutriment it furnishes.

"For a long time after convalescence has set in, it is all important to guard against cold and damp, and to protect him from any undue amount of exertion. His life even may be jeoparded by a neglect of this precaution."

CLINICAL RESEARCHES UPON AUSCULTATION OF THE HEAD.

By HENRY ROGER, M. D., Prof. Fac. Med. Paris.

It is well known that the first application of the discovery of Laennec to the diagnosis of diseases of the brain was made by Dr. Fisher, of Boston. In 1832 this physician communicated to a learned society a memoir upon the *cephalic bellows sound*, and transmitted his interesting researches to the *American Journal of Medical Science*, Aug. 1838. "Auscultation," said Dr. Fisher, "may be as useful in the symptomatology of the affections of the brain as it is in those of the chest, and may furnish a pathognomonic sign of these diseases."

After having traced the rules of cerebral auscultation, and indicated the normal sounds which reach the ear when applied to the head, and having distinguished those which come from the nasal fossæ, and which belong to respiration and phonation, as well as those which proceed from deglutition and from the head itself; after having distinguished all these from abnormal sounds, Dr. Fisher considers the *cephalic souffle* in diseases of encephalon. He mentions, among other affections of which an abnormal bruit is one of the symptoms, *chronic hydrocephalus*, *cerebral congestion*, either simple or resulting from disordered dentition or hooping-cough, *accute inflammation of the encephalon or its membranes*, *abscess* of the brain and *induration* of that organ.

Dr. Whitney went even further than his colleague in his opinions with regard to the symptomatological value of the cephalic souffle (*American Journal of Medical Science*, Oct. 1843). To the affections mentioned by Dr. Fisher—cerebral congestion, meningitis, &c., in which the stethoscopic phenomena were present, he adds scirrhous transformation of the cerebellum, and mechanical compression of the brain. He says, moreover, that he perceived a *cerebral ægophong* in hydrocephalus, a bruit similar to the *catarrhal fremitus* in aneurism of the arteries at the base of the brain, and finally he points (and with reason, in certain cases) to the existence of a *cephalic souffle* in *anæmia of the brain* and also in *chlorosis*.

Notwithstanding the labors of these two American authorities, each of whom confirmed the observations made by the other, and in spite of results which generally agree, and which seem to have the testimony of numbers—for the facts in their memoirs count by hundreds—cerebral auscultation, which promised to throw an unexpected light upon a very obscure point in pathology, met with but little favor. The European medical journals confined themselves to incomplete analyses and short extracts; while but few practitioners thought it their duty to repeat the experiments necessary for a criticism of the facts which had been stated by our American brethren, as if they mistrusted a discovery coming from such a distance.

In the year 1841, in the first edition of the *Traite Pratique d'Auscultation*, mention was made of the observations of Drs. Fisher and Whitney; but the experiments to which M. Barth and I devoted ourselves for testing their truth, though certainly not very numerous, only gave us negative results. After having searched in vain to discover a cephalic souffle in certain cerebral affections, and having been unable, in twelve or fifteen cases of meningitis, to hear any such, while the American doctors declared it to be present in all; strengthened besides in our scepticism by the silence maintained by MM. Andral and Bouillaud upon auscultation of the head, and by the equally negative observations of MM. Fournet and Vernois, in nine or ten cases of meningitis, and of Professor Piorry,* we thought it right at that time, and in subsequent editions of our work, to express doubts of this new application of the stethoscope, and were led to dispute, if not the reality, at least the importance of auscultation of the brain.

Still I always regretted this summary condemnation of the undoubtedly conscientious labors of two professional brethren. That results stated in America as certain should be absolutely and generally denied in Europe seemed not a little extraordinary; and we must either suspect the mode in which the physicians on the other side of the Atlantic made their obsertions, or confess that in this hemisphere we were deaf to sounds distinctly heard in the other. Shall we say with Harvey's adversary, the old Venetian physician, "*quem nos surdastri audire non possumus*"—"in Europe people are deaf; they only hear that in America '*tantum modo in America exauditur.*'"

As the only means of deciding the question was by making

* Traite de pathologie iatrique, tom. viii, p. 353.

more minute clinical observations, I devoted myself patiently to this difficult task, and began afresh the study of cerebral auscultation. My researches were almost exclusively among children,* because it is chiefly among them, when at the breast, that Drs. Fisher and Whitney said they heard the stethoscopic phenomena, the discovery of which they announced; and because the difficulty of diagnosing diseases of the brain is greater in childhood than in later life, a greater interest belongs to the progress which symptomatology would make in this department. I may add in passing that it is only among children, whether subject or not to cerebral disease, that auscultation of the brain is likely to be of use; for beyond a certain age, or beyond a certain period in childhood, the most practised ear applied to the cranium cannot detect morbid cephalic bruits.

Since I began collecting the observations which form the subject of this memoir, several authors have been similarly engaged in cerebral auscultation, among others MM. Rilliet and Barthez, and M. Hennig, head of the Children's Hospital at Leipsic. The first, in their admirable work (2d edit., vol. ii. pp. 158–9), make some remarks on the cephalic souffle in cases of hydrocephalus and in rachitis; I shall have occasion to quote the passage where they speak of this bruit under the head of the diagnosis of these affections. The German author has written a monograph upon this subject, and in a pamphlet of not less than thirty pages (*Archiv fur physiologische Heilkunde.* Stuttgart, Aout 1856) he reproduces, with annotations and additions, the inaugural thesis of Dr. Wirthgen (*De strepitue qui in capite auscultando auditur*, Leipsic, 1855), which indeed appears to owe its birth to him, and in which he successively studies the normal and abnormal bruits discovered by cerebral auscultation, the seat of those bruits, the age at which they are heard, their physiology and pathology, and especially the mechanism of their formation, and from these he deduces the results which the physician may expect to find in practice. I had completely devoted myself to the study before I became acquainted with the researches of M. Hennig, and we shall see, by the details of my observations, how far my conclusions agree with his.

Perhaps the admirable work of the Leipsic physician is faulty from a want of method and perspicuity, of which French

* I have never been able to detect any cephalic bruit among adults, either in apoplectic patients, or young chloro-anæmic females.

readers complain greatly in the writings of the learned German author. M. Hennig does not give with sufficient clearness the details from which he drew his deductions, nor his mode of proceeding in collecting facts; the number of cases from which he decides (and they do not appear to be very numerous) are not indicated with precision; all this necessarily diminishes the value of his statements.

In order that I may not incur the reproach just cast upon the German author, I may say that the conclusions which are recorded in this paper were drawn from an examination and comparison of a very considerable number of observations, their total being nearly 300; at first they were gathered from cases selected from among children whom I thought were affected with cerebral disease, or were the subjects of rickets; then (having determined the existence of a cephalic souffle among children of healthy appearance) I afterwards examined all cases indiscriminately, whether in the wards of the Hospice des Nouveaux Nes, the Hopital des Enfants, or in private practice.

Plan of the Memoir.—Having made these preliminary observations, we come now to the study of facts, and after having traced out the *rules* which facilitate auscultation of the head, I shall point out what *physiological bruits* the ear discovers when applied to the cranium; and in a third chapter, the longest and most important, *morbid bruits* will be specially considered.

Section 1. *Rules for Cerebral Auscultation.*—When a patient is submitted to stethoscopic examination the most convenient position is the horizontal, with the head placed upon a pillow slightly raised; this may be inclined to different sides, according as it is desirable to examine the occipital, frontal, or temporal regions, etc.

In examining an infant at the breast, it should be seated on the knee of its mother or nurse, and the head should, if possible, be held steadily, either by the hands placed softly on either side, or by leaning it against the mother's breast. If the patient be in a comatose condition from some cerebral affection, auscultation will be easily performed. It becomes difficult when the child cries or moves about, which is usually the case; we must then try to quiet it by suckling and ausculti while it is at the breast, the bruit of deglutition being no obstacle to the recognition of morbid cephalic bruits.

If the examination be impossible while awake, it must be abandoned till an attempt can be made in quieter moments, or

we may make the attempt during sleep, which is generally sufficiently profound not to be disturbed by the examination of a physician.

The auscultation may be either *direct* or *indirect*. Dr. Fisher found the latter the most convenient, the ear adapting itself exactly to the rounded or projecting surface of the cranium. Care must be taken to prevent the rustling of the hair; also, as a matter of cleanliness, the child's head should be previously covered with a napkin, which may serve at the same time to keep it more firm. Auscultation, practised thus directly, possesses some advantages; whatever may be the cries or agitation of the little patient, one always finds, in applying the ear quickly and somewhat firmly to the middle of the anterior fontanelle, that we catch, so to say, the sound of a cephalic souffle. But when the child is asleep, or when it is willing to remain quiet, mediate auscultation is preferable; it allows the detection of the bruits with greater precision and exactness, and we may also isolate them, so that those which are natural are not confounded with those which are abnormal.

For this purpose the ordinary stethoscope, which has been generally substituted for the primitive cylinder of Laennec,* answers perfectly; held as a pen in writing, it should be applied over the different regions of the cranium, and be kept fixed in the same way as for auscultations of the vessels of the neck. M. Hennig recommends the employment of a flexible stethoscope, twenty-three centimetres long, having for its middle portion a tube of vulcanized India-rubber. This stethoscope is certainly preferable, for with it we can easily follow the movements of the child during the examination.

On what regions of the head should the instrument be applied in order the better to detect the physical phenomena? If Drs. Fisher and Whitney are correct, the bruit of the cephalic souffle is so evident that it suffices to apply the ear to any parts of the cranium in order to discover it immediately; but our experience does not bear out this assertion. It may be true that the bruits of nasal respiration, and of deglutition, are perceptible over nearly the whole surface of the head, but this is certainly not the case with the genuine cephalic souffle, which we have most frequently heard in the region of the anterior fontanelle, and still more plainly when we auscult over the fontanelle itself. It gradually diminishes in intensity the further we remove from that point, which ap-

* Traite Pratique d'Auscultation, cinquieme edition, p. 19.

pears to be the center whence the bruit starts; then gradually becoming more feeble along the parietal or frontal sutures, it is completely lost further away, the finest ear failing to discover any sound over the lateral surface of the cranium and the occipital protuberances.

The physician who cannot count for long docility of his little patient would do well, if he wishes to detect the cephalic bruit, at once to place his stethoscope on the summit of the cranium over the depression corresponding to the anterior fontanelle; it is there, as we have said, that the abnormal bruit exists in its greatest intensity, and the examiner, if he does not detect it at that point, may dispense with any further investigation.

Section II. *Physiological Bruits.*—When we practice auscultation on the top of the head of a healthy subject, different bruits are heard.*

I. One is produced by the circulation of the air in the nasal fossæ; this is the *cephalic bruit of respiration* mentioned by Dr. Fisher; it is very intense and harsh, and analogous to the laryngeal respiratory murmur; it coincides with the respiratory movements, increasing in strength and frequency when these are accelerated.

These characters are sufficient to distinguish it from other cephalic bruits; but in some cases of extreme dyspnœa the nasal respiratory bruit is so frequent and quick that it might easily be mistaken for the cerebral vascular souffle of which we have just spoken, and the two phenomena might be confounded were it not for the close relation which the first bears to the movements of the thorax.

When the pituitary membrane is thickened or there is much secretion of mucus, the respiratory cephalic bruit is transformed into a sibilant rhonchus, or into a kind of coarse crepitation; the same physical conditions of the mucous membrane exist as in bronchitis, and consequently the same rales are heard.

Nor is this all; in affections of the larynx, the bruits caused by the passage of the air along the laryngo-tracheal tube are drier and more or less prolonged, extending above into the nasal fossæ as well as into the bronchial tubes below, and the rhonchus or laryngeal hissing (similar to the bronchial rales)

* In treating here of *auscultation of the head*, I shall not consider *aneurisms* of the larger arteries of the brain, nor *diseases of the ear* (see the work of M. Gendrin and an admirable article by M. Menier, in the *Traite pratique d' Auscultation*, 5th edit. p. 562.)

everywhere heard is more perceptible in auscultation of the head than it is in that of the chest.

With regard to the rales formed in the lungs, these are not heard from so great a distance, and they escape stethoscopic examination when practised on the head; in the very exceptional case of a young phthisical girl I was able to detect, by cerebral auscultation, a loud gurgling which was produced in a cavity in the subclavicular region.

II. If the child speaks or cries the *vocal sounds* are heard very distinctly, and the ear, when applied to different parts of the cranium, perceives a very remarkable resonance; this *cephalic resonance* may be compared to that which is heard so loudly in the larynx, it has nasal timbre which varies in different individuals, it is always very piercing, the voice seeming to proceed from the cranium.

III. Placing the stethoscope on the head, another peculiar bruit may be heard, that of deglutition; in new-born infants there is also that of suction. This bruit is so singular and so readily recognized that there is no need to describe it. We hear it more distinctly by direct than indirect auscultation, and in cases where the nurse appears to have but little milk, and when consequently the child makes frequent efforts at suction without our being able to decide the fact of its having swallowed anything, we may be able to determine this by cerebral auscultation, the bruit of deglutition comes very strongly upon the ear, and we are therefore better able to appreciate the quantity of milk supplied and swallowed.

Such are the *extrinsic bruits* revealed by cerebral auscultation; moreover, it is not impossible to a practised ear to hear in some subjects, especially in cases of palpitation, the two sounds of the heart propagated from the solid walls of the cardiac region up to the head. In forty-two healthy infants five times I was able with attention and patience to perceive the tic tac of the heart in ausculting over the cranium. In another case, I have been able to hear a strong bellows-sound originating in the left auriculo-ventricular orifice; but this last case was exceptional. More frequently the cardiac sounds themselves escape observation in auscultation of the brain; and we may, for greater simplicity in studying the subject, omit the *cardiac cephalic bruit*, at least as it has been described by Drs. Fisher and Whitney.

With much greater reason we shall contest the possibility of recognizing with the ear the modifications which so-called cerebral diseases create: for example, Dr. Fisher says he is

able to discover in almost every case (thanks to his aptitude for cerebral auscultation), the impulsive character of the pulsation which he supposed to belong to apoplexy. These, however, are minutiæ of such exceptional cases (*rara non sunt artis*), and tend only to embarrass without enriching semeiology.

IV. Are we, then, to include in the physiology of the subject an *intrinsic bruit*, the *cephalic souffle*, an essentially pathological phenomenon?

On this point, those authors who have specially directed their attention to auscultation of the brain are far from being agreed. With the American observers, the souffle is always abnormal, it is never a healthy phenomenon. Dr. Fisher expressly says, "it depends always upon some cerebral affection." Dr. Whitney equally insists upon the proposition, that auscultation never reveals anything like a cephalic souffle in the normal condition.

M. Hennig, on the other hand, believes that the souffle belongs rather to a state of health;* and, further, this bruit, which according to the American doctors would be much more manifest as the cerebral affection became more marked, would, according to the Leipsic physician, sometimes disappear in sick children, to reappear with returning health.

If we seek among our own facts whether the American or German authors are right, the first declaring that in the normal state the cephalic souffle is never heard, and the second being of opinion that it is always heard; we incline to believe that both are equally wrong, and that these two exclusive opinions are alike to be condemned.—*London Med. Rev.—American Journal.*

* So we gather from several confused passages in his Memoir where cephalic bruits are considered. "We have heard these bruits (M. H. does not say which) on the head from the twentieth week to the sixth year.——These bruits have been present in healthy children at the twenty third week." (*Loco cit.* p. 413.) "The souffle or hissing which is present in *healthy* children. (*Ibid.* p. 415.) "These bruits are sometimes wanting in sick children, but reappear with convalescence." (*Ibid.* p. 413.)

SUBSTANCE OF A CLINICAL LECTURE ON A CASE OF EMBOLON OF THE FEMORAL ARTERY PRODUCING GANGRENE OF THE FOOT—FATAL RESULT.

Under the care of Dr. Pitman and Mr. Prescott Hewett.

James M——, aged fifty-six, was admitted in November, 1861, under the care of Dr. Pitman. The patient was just convalescent from a severe attack of dropsy connected with heart-disease; and he was going about the ward up to the 17th of December, when he was suddenly seized with violent pain in the left groin, "exactly as if he had been shot." From that moment the limb became numb, cold, and quite powerless: "it felt as if it was dead;" and he was obliged at once to take to his bed again. All that afternoon and night he suffered intensely; and when seen by Mr. Hewett, at Dr. Pitman's request, he was still complaining of great pain in the whole of the limb, but especially in the groin. The limb was colder than the rest of the body; and there were blotches of discoloration spreading over the toes and back of the foot, with a slight œdema, and considerable redness extending halfway up the leg. A careful examination of the groin, at the exact point where the pain had been so suddenly experienced the day before, showed that the femoral artery was plugged. Reduced as the patient was from long-continued suffering, the size and exact limits of the plug could be distinctly made out. It began at about two inches below Poupart's ligament, and extended for three-fourths of an inch down the course of the vessel. At this spot it was quite hard, round, and rolled under the finger; pulsation was felt above, but not below, the plug; no pulsation was present in any of the arteries of the leg or foot. The general aspect of the patient was unhealthy; the skin of yellow tinge; countenance sunken, anxious, and worn; pulse intermittent and very feeble. The heart's action was irregular and feeble; but there was no valvular disease. The diagnosis arrived at was blocking up of the femoral artery by a plug of fibrin washed from the heart. The limb was wrapped in cotton-wool, compound soap liniment was rubbed in the groin to ease the pain, morphine was given, and stimulants freely. The gangrene advanced slowly about the foot; the toes became shrivelled, black, dry, and nummified; and

the œdema and redness increased. The man became weaker and weaker, and died on the 23rd of January, 1862. A few days before his death the gangrene ceased, after involving two-thirds of the foot. On a consultation, considering the man's low typhoid condition, it was decided not to attempt any operation.

Autopsy.—The plug in the artery measured three-quarters of an inch, and was situated in the upper part of the superficial femoral; and, exactly corresponding to the seat of obstruction, the parts around were thickened, and the vessel was firmly adherent to the sheath and to the vein. This plug was throughout adherent, and was hard, rusty on its surface, fawn-colored, deep-seated, and like the fibrinous layers of an old aneurism. The heart was large and flabby; there was no endocarditis nor disease of the valves, but entangled among the fleshy columns of the left ventricle, and filling up and projecting beyond the interspaces, where several large fibrinous masses, for the most part of a fawn color, very firm, and evidently of long standing; and a similar mass, of large size, was also found blocking up the left auricular appendix and projecting into the cavity of the auricle itself, where it was pendulous. Besides these there were also (especially in the right ventricle) some loose coagula of recent formation. The large vessels were healthy. The lungs were inflamed at their lower part. At the upper and lower parts of the spleen were two very large fibrinous concretions, of a deep-yellow color and firm in texture; and the arteries leading to them were found blocked up with fibrin. All the other viscera were healthy.

In commenting upon the case, Mr. Hewett remarked that it afforded for consideration some important points in surgery. First, as to the diagnosis. What led to the conclusion that the case was one of embolism? "The gangrene of the foot and the condition of the leg showed that there was obstruction of the arterial system in some part of the limb. Then came the question as to the precise locality of the obstruction. This man, you will remember, had "felt as if he had been shot in the groin." Well, that led at once to the examination of the femoral artery at this spot; and there the vessel was found blocked up. But what caused the obstruction? Was it an embolus? The sudden shooting pain in the groin, the immediate loss of sensation in the limb, the complete obstruction of the vessel, the limited extent of the plug, and its precise locality—about the giving-off of the deep femoral,—all

tended to prove that the plug had not originated in the artery itself, but had come from a distance. Whence came the plug? From the left cavities of the heart, in all probability. To this, however, it may be objected that there was nothing to prove the existence of anything like vegetations on the surface of the valves. True; but there may be some fibrinous coagula entangled in the meshes of the fleshy fibres of the heart, and one of these coagula may have been washed from its place, and swept along the arterial current until it was suddenly stopped by getting into a vessel through which it was too large to pass. And, moreover, even supposing that vegetations had existed on the valves, a vessel of the size of the femoral could hardly have been blocked up by one of these vegetations set loose. The portions of such vegetations when washed off from the endocardium are generally of too small a size to plug the main artery of a limb; but they pass into the lesser branches, and, for the most part, lead to mischief about the brain, the spleen, the kidneys, or the liver."

That this reasoning was correct post-mortem inspection proved. A reference was made to cases recorded by M. Nelaton and Mr. Sibley: in them, as in the foregoing case, the embolism was the result of a fibrinous clot, and not arising from vegetations.

Mr. Hewett then entered into the question whether the case was one of arteritis, and not of embolism; and he showed that it could not be the former, chiefly for the reasons that the man lived thirty-seven days after the commencement of the attack (hence the adhesion of the plug to the artery), and that the inflammation did not precede but followed the plugging of the artery; and the condition of the spleen after death further proved the case to be one of embolism.

The question of amputation in gangrene connected with embolism he thought an important one. In the present instance it was set aside by the patient's general condition, which was so thoroughly hopeless that all thought of operating was abandoned, even from the beginning. Had the general health been otherwise, amputation might have been performed with good prospects of success. In a case of embolism with obstruction high up in the limb he thought amputation quite useless until after the setting up of the line of demarcation, without which it is impossible to say what parts may or may not become involved in the gangrene. But in a case of rapidly advancing gangrene, in which the patient has but too evidently only a few hours to live unless something is done,

and that without delay, it would be right to amputate at once, provided the plug in the artery be at a sufficient distance from the trunk to admit of removing the limb above the seat of obstruction.

In conclusion, Mr. Hewett referred to the treatment of aneurism by breaking up the coagula, which had been proposed by Mr. Ferguson. This treatment he considered, in fact, embolism artificially produced; and if resorted to in aneurisms connected with the current of blood proceeding to the head, it may, there is no doubt, lead to disastrous results —results the very same as those described in Dr. Kirk's paper. Hemiplegia, doubtless due to embolism, followed the breaking up of the coagula in an aneurism of the subclavian artery in one of Mr. Ferguson's cases. Last year another was mentioned by Mr. Teale, of Leeds; and a third case, for the reference to which he (Mr. Hewett) was indebted to his friend Mr. Ernest Hart, occurred in the practice of Professor Esmarsh, of Vienna. In this last case, post-mortem inspection proved the truth of the supposed cause of the head symptoms.—*London Lancet.*

IS ALCOHOL FOOD?

By THOMAS INMAN, M. D., London,
Physician to the London Royal Infirmary.

The author first devoted a few words to definition stating that by "alcohol" he intended to comprise those liquors in common use which owed their effects to alcohol; and by "food," anything which supplied food by which the body was nourished. He then adverted to the fact that a saccharine material was found in the blood of all mammals when it entered the lungs, and to the strong probability that a fermentative process took place in those organs, with the extraction of carbonic acid, the actual source of which in the blood had not yet been absolutely ascertained. The close atomic composition of starch and sugar and alcohol *plus* carbonic acid was pointed out; also the fact that the starches, &c., and alcohol were often tolerated by delicate stomachs when other ingredients were not tolerated.

The author then shortly summarized the effects of ordinary food, whether animal or vegetable, when taken with water for

a beverage and in proper quantity, and compared these with the results following a temperate draught of ale or porter; showing that there was no real distinction between the one and the other, except that the liquid sooner entered the circulation and sooner left it. It was no argument against the use of beef that a man who had dined on it one day wanted a dinner the day after; nor against beer, that a person who had taken one glass was ready for another in a few hours. The prejudicial effects of excessive eating were adverted to, and after mentioning a few instances where guzzling had proved fatal, others were alluded to in which a prolonged lethargy or an apoplectic condition had been induced. The use of beef-tea sometimes produced convulsions in infants, but this result did not vitiate the dietetic value of meat. The physical condition of excessive eaters was then spoken of, and it was shown that some were thin, others stout; and that as regarded the moral condition of those who, from choice, religious belief, or necessity, abstained from the use of alcoholic beverages, they were to the full as bad as those who indulged in drink. Cannibals were teetotallers, and neither Nana nor Tippo was a drunkard. On inquiring into the habits of total abstainers and those who drank ale, wine, etc., the author had ascertained that the former habitually ate much more than the latter; and one of three deductions was necessary: either the former ate too much, the latter too little, or the drink of the one was equivalent to a portion of the food of the other. To ascertain which of these alternatives was nearest the truth Dr. Inman experimented in his own person, and had made numerous observations through the assistance of friends. The conclusion he came to was that which had been previously insisted on by Mr. Lewes and others,—namely, that alcohol replaced a certain amount of food; and "as things which are equal to the same are equal to one another," he inferred that if a glass of ale was equal to a slice of mutton in its satisfying effect, and that mutton was food, it must follow that ale is food. To say that persons could not live on ale, was of no value as an argument; for no one could live on biscuit alone, though bread was called the staff of life. To ascertain how long it was possible for any one to live on alcohol alone, he had for several years been seeking information respecting drunkards, and he mentioned two—one on the authority of the individual herself (a surgeon's widow), and the other on the authority of the medical attendant, where patients had subsisted for a prolonged period on brandy-and-water alone. He mentioned

others on the authority of other medical friends, and two which he had himself been conversant with. He combated the idea of the probability of imposture, inasmuch as in all these cases solid food was loathed excessively, and was generally rejected by the stomach. He then mentioned some cases of children that he had attended, in whom the appetite had failed entirely, where food which was administered by force had been vomited, yet in these alcohol in one form or other gave the support which other food did not, and gradually restored the appetite to its normal state. He noticed, too, that infants at the breast, when ill, would digest brandy-and-water when they would reject all else. The advantageous influence of this fluid was apparent even if it were administered in enemata.

A definite course of induction, irrespective of chemical theory having ended in the conclusion that alcoholic drinks were strictly alimentary, he shortly referred to the statements which were relied upon to demonstrate the contrary. If alcohol, he said, passed out of the system unchanged, so did water; yet water was absolutely necessary to life. But there was no proof that the alcohol imbibed in a long symposium ever left the body. He inferred that if it did pass out of the lungs in vapor as largely as was assumed, a party of spirit drinkers would make the air of a closed room explosive; and he recalled the statement of Percira, that some northern race had found that two or three people in succession might keep up intoxication with "lolium temulentem" by drinking the urine of the first eater; yet none had discovered that the urinal of a drunkard contained anything equal to gin. But certain foods, as oatmeal, bran, potatoes, oats, etc., were not wholly retained in the system, yet they were alimentary.

Dr. Inman then combated the idea that alcohol was a mere stimulant, by contrasting it with turpentine, cantharides, ginger, cayenne, iodide of potassium, and other drugs, which were stimulants to every part of the body to which they were applied. He argued that alcohol could not simply be a conservator of tissue; for a glass of ale after a long walk would induce plentiful perspiration, and a glass of whisky or gin-and-water acted with most people as a powerful diuretic. Nor could we conclude that it assisted in disintegrating the tissues; for if it did, the use of ale, wine, or spirit must then be antagonistic or antidotal to food, and the winebibber must necessarily require more food than the teetotaller, whose tissues were not disintegrated by artificial means.

He then summed up his conclusions thus:

1. Nature has provided in the salivary glands, the liver, and the lungs of every mammal an apparatus for converting all food, especially farinaceous, into alcohol; and we have no evidence that such conversion does not take place.

2. One form of alcohol or another is available for the support of life, and for restoration to health when no ordinary food can be or is digested.

3. Alcohol, after being taken, is incorporated with the blood, passes into the various tissues, and ultimately disappears, a small portion only passing away in the breath. We can say no more of bread, potatoes, or oatmeal porridge, a small portion of each of which passes out of the body with the fæces.

4. Alcohol in the form of ale, porter, wine, etc., relieves hunger and quenches thirst simultaneously, and with a completeness that is not equalled by water, infusion of gentian, cayenne pepper, or by turpentine—i. e., it does not act as water simply, or as a stimulant alone.

5. Wine, beer, etc., satisfy the appetite when taken alone, and act for the time like any solid food would do.

6. When alcohol is mingled with other food, a less amount of the latter suffices for the wants of the system than if water had been used as the drink.

7. The various forms in which alcohol is taken have as marked and specific effects as have animal and vegetable articles of diet.

8. Individuals have subsisted wholly upon one or other of the various forms of alcohol in common use for periods of great length; and as it is illogical to conclude that they lived on air, without food, or on flies like chameleons, the conclusion is irresistible.

What that conclusion is, it might be left for every thinking man to decide.—*London Lancet.*

TREATMENT OF SCARLATINA.

By T. HILLIER, M. D.

In estimating the effects of treatment, it is very important to remember that in this, as in many other diseases, some cases are so severe that no treatment will prevent death; that

other cases are so mild that they will recover even if left to themselves, or badly treated; whilst a third set of cases of intermediate severity, if well treated, will recover, and the speed and completeness of their recovery will be influenced by the mode of treatment; but the same cases, if injudiciously treated, will not recover at all, or recovery will occur only after more protracted illness, and with greater damage to the constitution.

Fully to judge of the value of our treatment, we ought to know how similar cases progress if left to themselves; this our homœopathic neighbors, if they practice as they profess, might give us an opportunity of observing. We may, of course, learn much by comparing cases treated on one plan with others treated on a different plan; but here, too, we must be careful to compare cases of equal severity, and as nearly as possible alike. We have not arrived at any specific antidote to the poison of scarlatina by which we can either prevent its taking effect, or counteract its influence when in operation. As a preventive belladonna has been vaunted, but it has not stood the test of careful experiment. We know of no means of prevention but the avoidance of exposure to the infection.

This disease is frequently spread in public schools by children convalescent from the disease returning too soon after their illness to associate with other children; it is also not uncommonly spread by patients conveyed in cabs and other public vehicles. Medical men should always wash their hands after touching a case of scarlatina, and, if possible, walk some time in the open air, and change their coats, before seeing other children.

Some future Jenner may discover that the inoculation of a disease bearing the same analogy to scarlatina which cowpox does to smallpox, will prove a protection against it. At present all we can do is to combat symptoms as they arise, and help Nature to get rid of the poison. Mild cases of scarlatina require but little medical treatment. The patient should be kept in bed for a fortnight, and not allowed to leave his room for three weeks; the diet should be bland and simple (animal food being forbidden); the bowels may be regulated by mild aperients; the skin may be sponged frequently with tepid water; and the bedroom should be kept cool and well ventilated. Some simple saline medicine may be given. The plan adopted in this hospital instead of sponging, has been to anoint the whole surface twice a-day with suet. It is grateful

to the patient, relieving the sense of tingling and burning heat which is frequently complained of. During convalescence the use of warm baths is indicated. If desquamation is active the hot-air bath is very useful in combination with warm water baths. This measure is especially desirable if there be albumen in the urine and anasarca.

In severer cases, quite at the outset an emetic of ipecacuanha should be given, and if the tongue be much coated an aperient dose of rhubarb and sulphate of potash may follow at the end of twelve hours. In the malignant cases, with much depression and sensorial disturbance from the first, the emetic and aperient should be omitted. In these cases, I believe, the best medicine to give is the sesquicarbonate of ammonia; and to promote the action of the skin, it may be combined with a good dose, one or two drachms, of liq. ammonia acetatis. The carbonate of ammonia may be given in doses of two, three, four, or five grains, according to the age of the child, and with frequency proportioned to the severity of the case.

In cases where the nervous symptoms predominate, such as delirium and convulsions, and the heat of the skin is very great, a remedy has been recommended, which I have only tried once, but on that occasion it certainly seemed to do good. It was first recommended by Currie, and has since been occasionally praised by others; it is spoken of very favorably by M. Trousseau. I refer to cold affusions. They have been less frequently resorted to than they probably otherwise would have been, owing to the apparent boldness of the practice, and its running counter to popular prejudice on the subject. Trousseau says: "For a long time I have employed these affusions. I declare to you that I have never administered them without deriving from them some benefit. I do not pretend that all my patients have been cured; those who have died have experienced temporary relief; the affusion, far from being injurious to them, has always moderated the symptoms, and has always appeared to retard the fatal issue." He then quotes several very severe cases in which this practice was attended with apparently the greatest benefit, and the patients made favorable recoveries.

His mode of proceeding is as follows: The patient is placed in an empty bath, and there are thrown on him three or four pails of water of a temperature from 68° to 77° Fahr. The patient is immediately afterwards wrapped in bedclothes, and placed on the bed without being wiped, but suitably covered up. Generally reaction is established before fifteen

or twenty minutes have elapsed. The affusions are renewed once or twice in twenty-four hours, according to the gravity of the symptoms.

The benefits derived from this treatment, according to Trousseau, are a reduction of the frequency of the pulse, a lowering of temperature, a cessation of delirium, and a diminution of the patient's restlessness and general distress. He also states that it usually renders the eruption more vivid, and never has the effect of "striking in" the rash, as it is called.

In the case in which I employed it there had been delirium and restlessness, and great heat of skin; there was no rash. The affusion was practised with water at a temperature of about 80°. The patient expressed herself as feeling much more comfortable a few minutes after the treatment; the temperature three hours later was nearly as high as before, but the skin did not feel so pungent or dry. From this time the patient continued to improve without an unfavorable symptom. It is true that the treatment was here applied about a date when improvement frequently occurs—namely, on the sixth day of the disease; but I confess that I have not often seen a case suddenly take such a decidedly favorable turn on any other plan of treatment. I intend, when another suitable case presents itself, to make a further trial of this remedy. As originally practised by Currie, the water used was of a lower temperature (the coldest he could procure), and affusion was repeated every two or three hours if the patient's symptoms called for it. Where the heat of skin was not so great, tepid water was used. This remedy is not applicable to cases where reaction is not well established, as in cases of extreme malignancy. The wet sheet I have tried in two cases, with satisfactory results.

As the fever subsides, and the patient is left languid with a pulse soft and slower, and skin cool, quinine is very useful.

The throat, if much involved, will require treatment. For mild cases a gargle of lemon juice and honey is agreeable and useful. For redness and swelling the use of chlorate of potash in solution (eight or ten grains to the ounce) is advisable, either as a gargle, or, if the child be too young, as a wash to be injected into the mouth with the patient sitting up. If there be much swelling, the employment of tannin, either by insufflation as a powder, or in solution as a wash, is beneficial. Ice may also be given with benefit. If the tint be somewhat livid and dusky, tincture of capsicum may be advantageously added to the gargle. This remedy is strongly recommended

internally by some writers on malignant scarlatina. Externally it is well to keep warm-water dressing, a bran poultice, or spongio piline around the throat. If the nose and mouth become clogged, it is important that they be syringed out frequently with warm water, or soap and water, followed by a weak solution of sulphate of copper in a few days, to prevent obstruction to respiration. If the secretion is thin and acrid, lime-water is best. In some cases, where the pulse is soft and frequent, and there is much depression, it is well to give wine from the first; and very often about the fifth day, when the tongue becomes dry, and the pulse becomes weak and falls in frequency, wine will be required if it has been withheld before. The effect of stimulants on the urinary secretion should be carefully noted, and if there be albumen in the urine, and a notable reduction in the quantity of urinary solids, they must be withheld. When there is much swelling of the neck coming on after the first week of the fever, stimulants are, I believe, indicated, and poultices should be applied externally. No good has been derived in these cases from the use of leeches. If matter forms early, lancing is desirable. For albuminuria or hæmaturia, with or without dropsy at the commencement, the great indication is to obtain a free action of the skin. This may be generally secured by small doses of antimonial wine with liquor ammoniæ acetatis, and the employment of the hot-air bath every night. It is well, too, to act on the bowels every second or third day by the use of compound jalap powder. Diluents, such as barley-water, toast-and-water, should be freely given. If there be much fever, and a tolerably firm pulse at the onset of the renal symptoms, cupping to the loins will probably be of service, and in any case dry cupping will do good. As the fever subsides, if the urine be tolerably abundant and of good specific gravity, but still contain albumen, the use of benzoate of ammonia, in five grain doses, seems to be of use; or if this fail, the tincture of the sesquichloride of iron will generally be of use. Sometimes it will be necessary to suspend these remedies, owing to an increase in the albumen and a smoky color of the water with a scantiness in amount, and to return to the hot-air baths and diaphoretics. The only diuretics besides benzoic acid that are allowable in this affection are, I believe, diluent drinks and digitalis, which appear to be of service when the pulse is quick and heat of skin considerable. Never rest satisfied or think your patient out of danger so long as albumen or still more blood remains in the urine; at

any time while this lasts, one of the secondary inflammations or convulsions may set in, and rapidly carry him off.

If convulsions occur, and the patient be not previously very anæmic, bloodletting must be resorted to once and to a good quantity. This may be followed up by dry-cupping to the loins, hot-air baths, and compound jalap powder or elaterium. Trousseau recommends large blisters to the legs; most English authors forbid blistering in any shape, from the fear that cantharides will act injuriously on the already impaired kidneys. They have been so frequently used beneficially, that this theoretical objection to their employment need not, I think, have much weight. I am not aware that their use has ever been followed by increase of the renal symptoms.

If pleurisy set in, or pneumonia, I advise cupping, with or without the knives, according to the force of the pulse; and the subsequent cautious employment of calomel in small frequently-repeated doses. Here, again, I run counter to a commonly-received doctrine that calomel should not be given in albuminuria; my experience, however, inclines me to believe that in the early periods of nephritis, before renal degeneration has much advanced, there is no risk, but positive benefit from its use. If there be much restlessness or distress, the calomel should be combined with Dover's powder. At the same time liq. ammoniæ acetatis and, if the pulse be firm, small doses of antimonial wine may be given. In peritonitis, I believe that opium, with very small doses of mercury, is the sheet anchor. In one very severe case, in which a lady had scarlatina immediately after parturition, followed by peritonitis, the recovery appeared to be entirely due to the use of opium in full doses, combined with small doses of gray powder, until the gums were slightly affected.—*Medical Times and Gazette.*

THE CHLORINE AND MILK TREATMENT OF SCARLET FEVER AND THE TYPHOID FEVERS.

By CONWAY T. EDWARDS, M. R. C. S. E.

The symptoms, development, and progress of scarlet fever and fevers of the typhoid type, have been so continually brought under public notice, and so ably treated in every

work on the practice of medicine, that it were superfluous to enter upon a consideration of them in this paper, and would not assist in any way the object I have in view, which is, to point out the beneficial influences which a chlorine and chloroform treatment, with a full diet of milk, exercise over these diseases.

It must not be understood that, in advancing these remedies to so prominent a position in the foreground, they are to be regarded in the light of specifics, or as interfering with the anti-phlogistic treatment and regimen which the medical practitioner finds it necessary to adopt during the first stages of febrile disease; but, as possessing the important quality in themselves of at once destroying the putrid effluvia generated by, and thrown off from, the secreting surfaces of the stomach, alimentary canal, kidneys, lungs, and skin, and endowing the system with power to bear the progress of the disease. These effluvia, so poisonous in themselves, on account of the large proportion of sulphurretted hydrogen which they contain, contaminate the air of the sick chamber, oppress nurses and attendants, and are most injurious to the patient. How important, then, must it be to remove them! This chlorine effects: its influence is no question of lengthened time; it commences at once, and continues during the whole course of its exhibition.

Now, as regards "a full diet of milk." From the very commencement of a fever, there is a very great loathing to all kinds of nourishment; the bare suggestion of food creates a shudder, which expresses, more than words can do, how repugnant the idea is to the feelings.

Adopt the once received and re-entertained Brunonian system; give *ab initio* nourishment and tonic medicines, and as the disease advances, with increase of weakness, and ever progressing waste of the solids and fluids of the body, perhaps the real nature of the attack may be suddenly developed and resist every remedial means to overcome it. In no disease is the truth of this more apparent than in typhoid pneumonia. Take a false view of the real nature of the attack; see in the fever everything save the current of inflammation which runs beneath it; suddenly the real truth will be developed, and the engorgement of the lungs is but the precursor of the fatal termination which will rapidly ensue. All antiphlogistic treatment would be useless; calomel and opium and antimony have no time to act, and the patient dies.

But the hourly increasing weakness and waste of the system

are very formidable symptoms during the course of fever: are these to be ignored, and no attempt be made to meet them? Had we but a life-sustaining diet, simple in itself, and not only agreeable to the patient, but eagerly accepted by him—a diet which in itself should contain meat and drink of the most unstimulating nature—how great a boon it would be to the sufferer!

What writes Dr. Thielman, the Russian physician, in his treatise on Fevers? "He had never seen delirium occur during the progress of *any* fever, under the influence of a full diet of milk, as *after broth!* It is not only well borne, but is easily assimilated, and endues the system with *power to resist* disease." This is exactly what is wanted. How does it agree with our own experience? Yet without going quite so far, if it only remained on the stomach with ease; relieved the thirst; sustained the nervous energy, thereby giving power to resist the disease,—important results would accrue from it.

It were needless here to enter upon the analysis of milk, or to show forth the reasons why it is the most life-sustaining of nourishments.

It is objected that milk is indigestible, and therefore not fitted for a weak stomach; that the gastric secretion (analogous to the rennet of the calf) at once separates the solid from the fluid part, the former coming away especially in children, untouched by the digestive organs. The theory looks well upon paper, but will not bear the test of experience. Curd itself is eaten with pleasure and impunity, not only in the delicious junket, as made to such perfection in Cornwall and Devonshire, but in the more homely form of closely-compressed curd, floating in its whey. Few beverages are more grateful to the palate, more refreshing, and more thirst-allaying than whey: it is the pleasantest and most cooling of summer drinks, and its effects are much more permanent than even water itself.

In giving milk to the fevered system, you have at once this most refreshing fluid generated in the stomach, and an unirritating solid formed, which in a greater or lesser degree repairs the waste of the living substance. The gastric juice converts the milk into what is popularly termed "curd and whey."

Now, as to the growth-giving and other nourishing qualities of milk, daily experience proves and shows, in the firm and excellently-tinted skin of healthy infants entirely brought up for seven or eight months upon milk, its potent and genial influence. The mother, being in good health, supplies a

nourishment which no science can equal and no art compound. It is nourishment particularly free from all irritating, clogging, and fever making principle. It is so curiously and wonderfully compounded, that up to a certain point the infant retains it; but beyond that it is rejected, sometimes from over-repletion, on account of its excellent nature, and sometimes from the eagerness with which it is taken.

In treating of milk as a diet especially for invalids, it must be understood that healthy, unadulterated milk is alluded to. This of course is very difficult to be obtained in large towns; almost impossible in the metropolis. In very circumscribed spots, in the latter, are assemblages of stalls, capable of holding several hundreds of cows. The impure condition of the heated air is patent to all. It cannot be other than unwholesome. Seldom do the animals scent the fresh air, feel the sunshine, tread the green grass, or take any exercise! Their daily life is spent in eating the most milk-giving, and of course heat-producing, food. In summer, perhaps, long grass, vetches, pea-halms, (cut and collected, it may be, for a day or two before use,) are given. In very limited space do they wear away their life in producing milk. The consequences need not be dilated on. The animals are mostly in a fevered state, many are directly diseased, and all produce a milk which (without inquiring too curiously into its composition when retailed to the public) is not healthy. This is not the milk to be selected for a fevered patient, and yet, boiled, it is preferable to a farinaceous or animal soup diet.

We will now turn to the bearing of what has been advanced on scarlet and other fevers.

About the year 1844, scarlet fever raged with some violence in the district where I had practised for many years. At an early period of the attack, typhoid symptoms developed themselves. The dryness of the tongue and fauces, the dark secretion on the gums, putrescent fetor of the breath and from the skin, renal and alvine secretions, attested the dangerous nature of the disease. In Bath, a very extraordinary symptom frequently developed itself, and seemed to be the sure precursor of death. This was a rigidity of the sterno-cleido-mastoidei muscles, of a nature so great that they felt like rolls of wood beneath the touch; the smaller muscles soon put on the same action, and the sufferer seemed in dying to be strangled. In the country district this formidable complication did not occur; but one family, fearful that an only daughter might take the

disease, left for Clifton. Before six weeks had elapsed, this child was seized with the complaint, and died.

In the early days of the epidemic, several fatal cases occurred in my practice, and something akin to a feeling of regret came over me when summoned to any new case. But an accident opened up a mode of treatment, which soon changed the fatal tendency of the attack. Two children, living at the National School, Bathford, took the complaint. They were relatives of one of the nurses at the Bath Hospital, and she came over to nurse them. The symptoms in one child were urgent from the beginning, and both head and chest suffered severely: the throat was studded with sloughing spots, and greatly swollen; the breath and all the secretions gave out the putrefactive fetor. The cases seemed to be of the worse kind. About the fifth day the nurse said: "She has been better, Sir, since she used that last gargle; the great restlessness is gone, the rambling talk has ceased, and all putrid smell from the breath and evacuations has left. I believe," she continued, "it was the gargle which did it, for she swallowed the first dose." This gargle was composed of a solution of the chloride of lime, alum, astum, compound tincture of iodine, water, and a little tincture of capsicum.

On examining the throat, I found the nurse's statement to be correct as to the breath; and not only had this beneficial change taken place, but the sloughing surfaces were assuming a brighter red, the sloughs were evidently contracting or curling up, and the tongue and gums were becoming moist. There was also a quietude about the look and features, which indicated that the nervous irritability was passing away. The nurse was so positive as to the cause of this favorable change, that she was directed to add a drachm of the solution of the chloride of lime to two pints of tepid water, with a little lemon-juice and sugar, and give it as a diet-drink to the patient. This, with a gruel and sago diet, and ammoniated effervescent mixture, and an occasional dose of rhubarb and grey-powder and James's powder, were given, until it was safe to administer tonics and good diet. The disease spreading, the same diet-drink was adopted, and the use of chlorine extended by directing the body to be sponged with tepid water containing it, twice a day. After the adoption of this treatment no fatal case occurred.

At the termination of the epidemic I read a paper on the subject before the Bath and Bristol branch of the British Medical Association, being justified in so doing from the

numerous cases which terminated successfully. One or two of the members expressed themselves dubious respecting the effects produced by such means, when the physician who had permitted the nurse to attend on her relatives rose and said that "he could vouch for the accuracy of the writer's statements, for his nurse had narrated to him the results of the treatment." This paper I subsequently published. A week after its publication I was agreeably surprised at receiving a polite note from Mr. Martin Ricketts, of Droitwich, (a total stranger to me,) stating that he had perused the paper with great interest and pleasure; that he could confirm all that I had written on the subject of the good effects of chlorine in scarlet fever; and that, strange to relate, a similar accident to a child using a chlorine gargle had led to the adoption of chlorine in his practice; lately, however, he had used a preparation made by the Apothecaries' Company at Liverpool, and termed *chloriform*, which appeared to him to possess all the antiseptic powers of chlorine, with a sedative influence peculiarly its own. The dose was from five to thirty minims. He requested my acceptance of a small quantity, regretting at the same time that it was so expensive." In this preparation lay hidden a grand secret—a glorious gem, sparkling, and beckoning to any scientific mind to free it from its prison-house. Its advances were unheeded, until Dr. Simpson first recognized in its component parts something which possessed all the anæsthetic properties of that fluid without its nauseous ones. What is its position now? It is first on the list of alleviators of human suffering; and the discovery of it should have won for its discoverer a world-wide testimonial. I soon recognized the preparation, made public towards the termination of 1844, to be the same as that sent me by Mr. Ricketts; and, like other medical men, freely experimentalized with it on animals, insects, etc., and then on our suffering fellow-creatures.

On the rebreaking out of scarlet fever and typhoid epidemic of the usual form, I prescribed chloroform; but as it did not remove the effluvia so effectually as chlorine I administered the latter in combination with it. It was, however, observed that after every dose of chloroform a great calmness and inclination to sleep were produced, unattended with any adverse cerebral symptoms.

The beneficial effects which the use of these remedial means produced in scarlet fever, likewise resulted from their exhibition in typhoid fever; so that I had every reason to be satisfied with the treatment.

But the power of preparations containing chlorine over infectious fevers was known long before the disinfectant principle was discovered to exist in that gas. The celebrated Dr. Parry, of Bath, was an advocate for the use of muriatic acid, both externally and internally, in fevers; but the beneficial influence of that medicine was not referred to the chlorine it contained. That acid is now termed hydrochloric, from its chemical constituents; and in the present day when the chlorate of potass is freely used in malignant fevers, sore throats, etc., is not frequently you find it acknowledged that to the liberated chlorine are the good results attributed. Read any book on fevers, from the school-book of the day to the popular *brochure* of the minute, and see what little stress is laid on the value of chlorine as an important curative agent.

Since my residence in London, numerous cases of scarlet fever have come under my care; and, with every disadvantage, in many instances, of impure air, small, ill-ventilated rooms, indifferent diet and nursing, two cases only terminated fatally, and these were seen some days after the disease had first appeared.

It must not be imagined from what has been advanced that these fevers were treated solely with chlorine, chloroform, and milk. The antiphlogistic system was invariably practised at the commencement of the attack, involving sometimes abstraction of blood, counter-irritation, chloride of mercury, potassio-tartrate of antimony, and purgatives, with gargles of capsicum, alum, iodine, and chloride of lime solution. It is after the first two or three days of this treatment that the internal and external use of chlorine and chloroform is so beneficial, and the milk diet can be depended on—or, if the stomach can bear it, gruel made thick as good cream, with two thirds milk; and when we consider what a state of irritation the mucous lining of the primæ viæ must be in, and how certain glandular structures are affected in all typhoid fevers, such a diet cannot but prove most soothing. In conjunction with these, sponging the body twice a day with tepid chlorinated water, change of linen and of bed (where two beds can be placed in the room), will contribute greatly to the general welfare and convalescence of the patient; whilst wine, ale, soups, and jellies can be deferred until the termination of the complaint approaches, or urgent symptoms demand them.

I have now brought my observations to a conclusion, with the hope that some other practitioner may be induced to publish his experience of chlorine and chloroform in fevers.—*London Lancet.*

EDITORIAL AND MISCELLANEOUS.

A First Rate Notice.—The attention of subscribers in arrears for the JOURNAL, is directed to the *billet doux* which Dr. E. Ingals encloses to each. The large advance in prices renders the littles now necessary. "Mony a little makes a muckle" is a homely but excessively true Scoth proverb, and we trust each delinquent will bear in mind. All good bank notes received, and genuine Treasury notes not refused. Don't forget the address:

DR. E. INGALS,
Box 14, CHICAGO, ILL.

About Fees.—Everything else has gone up—flour and meat, groceries and dry goods. Tradesmen and journeymen, artists and day laborers all have struck for and received higher pay. That is, paper has gone down (when stamped with the representative of money impress) and gold is invisible. Things threaten to become worse before they are better—the latter pangs are yet to come—perhaps "as in the curing of a strong disease, even in the instant of repair and health the fit is strongest;" nevertheless that happy instant has not yet come, and it becomes the physician to imitate "the rest of mankind," and give another turn to the crank of prices. What, with license fees, and income tax, and tax on about every conceivable thing one uses, with extra taxes clapped on every time it is used in a little different way, we shall have to quit living unless there is union and reform in this respect. One-third at least must be added.

In this city, where prices average say forty per cent. of the Society's scale, a general co-operation might perhaps lift them within telescopic distance of the fee-bill. This city is demoralized by the unscrupulous underbidding of men whose

position, at least, ought to lift them above such despicable expedients to secure and keep practice.

But in most places this evil is not present. We call, therefore, upon all respectable physicians, who rely upon their real knowledge and ability for success and not in selling themselves to the lowest bidder, to take hold of this matter in justice, not only to themselves, but to the profession at large. A little common sense, union and harmony, for the nonce at least, is all that is necessary to secure the result. No single practitioner of gentlemanly instincts wishes to victimize himself alone for the benefit of low-lived rivals.

Variola—Its Nature and Treatment. A Monograph by Andrew Nebinger, M. D., Philadslphia.—In this well written pamphlet the author urges what he denominates the "compensative nutritive" treatment of variola. It is an able plea in favor of what we have always believed the appropriate treatment of small-pox. He shows that it is not the inflammation which is to be feared, but exhaustion, to be met promptly by tonics, stimulants, and, especially, *nutritious diet.* We extract :

My practice has been in all cases of small-pox, during the initiatory or febrile and papular stages of the disease, to prescribe an antiphlogistic, medicinal, and dietetic treatment; but to abandon this form of treatment as soon as the papules begin to take upon themselves the vesicular form, and then commence a treatment which, in all its essentials shall be supporting.

In carrying out this treatment, I have not found any diet so useful, so grateful to the patient, or any which gave as little inconvenience to swallow when the mouth, fauces, and throat were studded with pustules, as a combination of eggs, milk, sugar, and ice, made in the proportion of one egg well beaten—half a pint of milk, sugar and ice in quantities suited to the taste and desire of the patient. When the necessity for stimuli has existed, as it does in all cases of the confluent variety of smallpox, I have added brandy, or what I think better, Monongahela whiskey, because for purity it can be

more safely relied on, and can more readily be obtained. The quantity of this diet which I direct the patient to use in confluent smallpox is half a pint, or a tumblerful, with a large tablespoonful, or half an ounce, of Monongahela whiskey added to it, every two hours or every hour and a half *during the day and night.* I have frequently had patients to take as many as twelve eggs, three quarts of new milk, and eight ounces of whiskey daily for several consecutive days—and yet, with all this supporting and stimulating diet, this most excellent proteine or highly nitrogenized food, these poor fellows barely escaped sinking into the grave, some of them having had (notwithstanding they were so vigorously supported with food, and so actively stimulated) that peculiar feebleness and tremor which is always the unmistakable evidence of a breaking up of the vital forces—the threatenings of dissolution.

He does not, however, confine his patients to the eggs and milk, but permits use of meats and poultry; in short, any food abounding in proteine elements—urging "that in such cases to eat is to live, to abstain is to die." The blood vessels must be supplied with material to enable a vigorous and rapid maturation of the pustules and all the offices of vitality.

Although this is in entire opposition to the dicta of Wood, Watson, Gregory, West, and other standard authorities, there can at the present time, be no doubt of its physiological and practical correctness. The so-called secondary fever is not to be broken down, but sustained. It is more analogous to hectic or typhoid than to the inflammatory.

In passing, we cannot forbear to say that, precisely the same principles are applicable in the treatment of all the phlegmasiæ.

Causes and Cure of Diseases of the Feet: with Practical Suggestions as to their Clothing. By C. H. Cleaveland, M. D., Cincinnati, 1862. The author, in this pamphlet, has given a very fair *resume* of the more common affections of the feet with judicious practical directions. The closing chapter, on the proper construction of shoes, is a very practical one at

the present time, and we commend it especially to those whose duty it is to provide the "grand army" with *understandings.* The book is rather for popular than professional reading, but contains much valuable information.

Annual Announcement of the University of the Pacific, with the Valedictory Address of Prof. Henry Gibbons, M. D. —We judge that Prof. G. scarcely claims to be a *progressive* in medicine, nevertheless he has afforded a very readable discourse. His doctrines find but few adherents in these degenerate times.

Advance Sheets.—We acknowledge with thanks receipt of advance sheets containing several very excellent monographs read before the N. Y. Academy of Medicine:

Isaac E. Taylor, M. D., on *Non-Shortening of the Cervix Uteri.*

J. Marion Sims, M. D., on *Vaginissums.*

A. K. Gardner, M. D., on *Amputation of the Cervix Uteri.*

Alonzo Clark, M. D., on *Albuminuria.*

B. Fordyce Barker, M. D., on *Peloic Hæmatocele.*

M. H. Ranney, M. D., on *Epilepsy.*

E. Noeggerath, M. D., on *Inversion of the Uterus.*

Comments and extracts may be given hereafter.

A Good Omen.—It is stated that Surgeon General Hammond has cut down the regulation supply of medicines to the army *fifty per cent.* The amount thus saved is appropriated to the increase of Hospital stores, including especially more nutritious diet.

Under the energetic direction of this sagacious officer the Medical Staff of the Army is becoming wonderfully enhanced in efficiency. Abuses are rectified as soon as discovered, improvements constantly made and the range of usefulness extended even though the Gordian knot of red tape have to be severed by often repeated strokes of his trenchant official catlin.

Physical Labor in Insanity.—At the annual meeting of the Association of Superintendents of Insane Asylums in the U. S., it was pretty generally agreed that those patients among the males who were engaged in outdoor labor, and those among the females who employed themselves indoors were always the most likely to be cured and go home.

The pecuniary value of the labor performed does not prove very considerable, but as a remedial agent it is of very great importance, as Dr. Gray remarked, "beneficial to the patient in promoting his comfort, facilitating his recovery, and producing quiet and order throughout the house." Great care is requisite that they do not work beyond their strength or until very weary.

Practical disadvantages sometimes ensue, owing mainly to the interference of friends and others who think if the patients work they ought not to pay for their board or treatment.

The idea is coming up everywhere, that those agencies which promote digestion and the formation of *good blood* with which to bathe diseased parts *from within, are the best curatives in all diseases.*

Cause of Parturition at a fixed Period.—A reviewer in the Sept. No. of the *Am. Med. Monthly*, commenting at some length on Prof. Bedford's Treatise on Obstetrics, refers particularly to the Author's explanation of the reason why parturition occurs at the close of a fixed period, and endorses it by the following remark: "We, therefore, now unreservedly agree with the reported judgment of one, himself a *Magnate* in physiology," [We suppose Prof. Paine is here intended, termed a '*Magnate*' from the size of his books.—Ed.] "that the explanation is *ingenious, plausible and satisfactory;* nay, more—we believe that it will be recognized in the future as the nearest possible approximation to the truth that could have been made at this time."

Prof. Bedford's explanation is certainly an approximation to the truth, better perhaps than Avicenna's "Grace of God"

doctrine—nevertheless, it fails wholly to include cases of spontaneous, or induced, abortion or miscarriage, which should be traced to the same mechanism.

Prof. B. attributes the uterine contraction to "*a matured development of the muscular structure of the organ itself*,"—which accounts for nothing but labor at nine months.

The true doctrine as many years ago (1848) elucidated by the present writer [Allen] and which may be found as published in the *Medical Independent*, Oct., 1857, p. 449, and republished in the *Reese's Medical Gazette*, Nov. 1857, p. 685, and in very many other journals. We extract from that article:

"Why does parturition occur at a fixed period?

"Because the changes in the blood of the mother, occasioned by the full development of the fœtus, produce that particular molecular change in the uterine muscle which necessitates contraction. The molecular change is the cause.

"The same blood-modification may occur from accidental causes, or through the medium of the nervous arc.'

Here it will be seen that all the phenomena are reducible to the same series. Diseases, poisons, mechanical agencies, or full development of the fœtus inducing that particular molecular change which, in all muscular structures, necessitates contraction. The mechanism is identical in all physiological, and indeed pathological, acts of extrusion.

But what puzzles us mainly is, that he of the "Institutes" should pronounce "*ingenious*, *plausible*, *satisfactory*," that which is essentially a doctrine which, in the delectable work alluded to, (§ 349 *d*) he calls upon all intellectual physicians to turn from with "LOATHING AVERSION!"

Surgeon J. V. Z. BLANEY, U. S. Vols., has been ordered to turn over the property in his charge (as Medical Purveyor at Alexandria, Va.) to the Medical Purveyor at Washington, and report for duty to Gen. Viele at Norfolk, Va. Surgeon I. H. RAUCH, U. S. Vols., has been directed to report to Maj. Gen. Banks for duty with General Augers' command.

DIRECTORY OF HOSPITALS.—The attention of clergymen, editors, and others is respectfully requested to the following notice, which is of interest to all who have friends in the army, and which it is therefore desirable should be widely published:

DIRECTORY OF THE HOSPITALS.

The Sanitary Commission have established an office of information in regard to patients in the Hospitals of the District of Columbia, and of Frederick City, Maryland. By a reference to books, which are corrected daily, an answer can, under ordinary circumstances, be given by return mail to the following questions:

1st. Is —— —— [giving name and regiment] at present in the hospitals of the District or of Frederick city?

2nd. If so, what is his proper address?

3rd. What is the name of the Surgeon or Chaplain of the hospital?

4th. If not in hospital at present, has he recently been in hospital?

5th. If so, did he die in hospital, and at what date?

6th. If recently discharged from hospital, was he discharged from service?

7th. If not, what were his orders on leaving?

The Commission is prepared also to furnish more specific information as to the condition of any patient in the District hospitals, within twenty-four hours after a request to do so, from an officer of any of its corresponding societies.

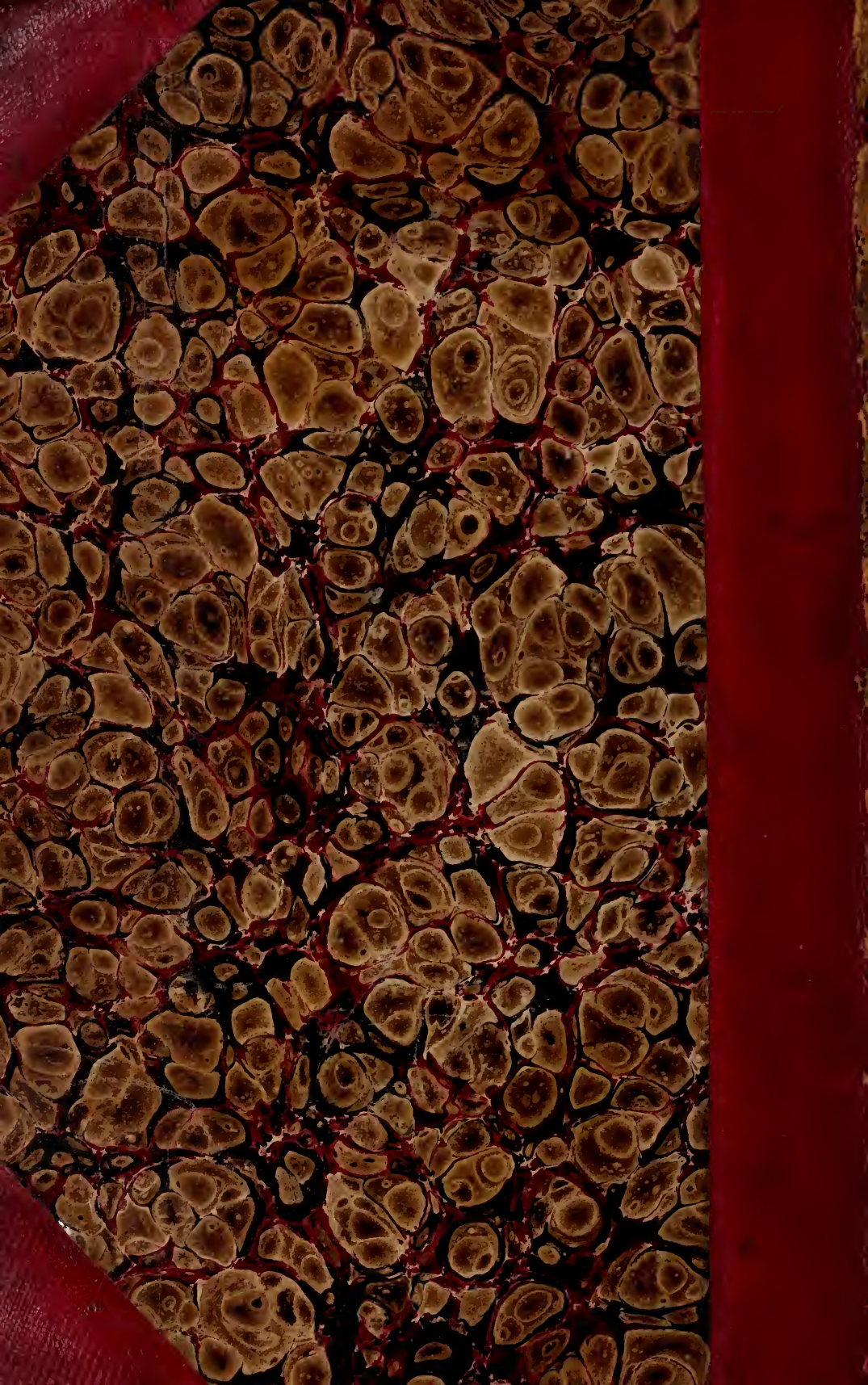
The office of the Directory will be open daily from 8 o'clock a. m. to 8 o'clock p. m., and accessible in urgent cases at any hour of the night.

The number of patients in these hospitals is about 25,000. If found to be practicable, the duty here undertaken locally by the Commission will be extended to include all the general hospitals in the country.

FRED. LAW OLMSTED,
General Secretary.

Adams House, 244 F street,
Washington, D. C., November 19, 1862.

The Physician's Hand-book of Practice for 1863. *By William Elmer, M. D.*—Those who have become accustomed to the convenience of this pocket memorandum would very much miss its annual appearance. Among other things, it contains a classification of diseases, a list of remedial agents, of incompatibles, poisons and their antidotes, a diagnostic examination of the urine, a record of practice and treatment, an obstetric calendar, a general memoranda, &c. It may be obtained from our principal book-dealers, or from the Publisher, W. A. Townsend, New York.

Dentition and its Derangements. A Course of Lectures by A. Jacobi, M. D., Prof. of Infantile Pathology, Therapeutics. New York: Bailliere Bros., 1862.—The large extracts given from this series in our pages precludes the necessity of our recommending this little work to our readers. It is a valuable contribution to the literature of the subject.

Overcrowding of Military Hospitals.—In the French military hospitals 1700 cubic feet of air-space are allowed by regulation to each patient. In this country the minimum is fixey at 1000 cubic feet. And yet of our 150 military hospitals, we venture the assertion that not five per cent. allow 800 cubic feet of air-space to each patient, whatever may be their system of ventilation. In the majority 700 cubic feet is the maximum of air-space to each patient, and from this point hospitals may be instanced representing various figures in the descending scale as low as 250 cubic feet. And this last amount—little better than the famous Black Hole—is the maximum of air-space allowed in hospital buildings originally constructed for barracks, and almost destitute of ventilation. In large numbers of hospitals the beds are arranged at given intervals, without the slightest regard to the cubical area of the wards. The results of overcrowding are apparent in every hospital where it is practised, in the prevalence of low forms of fever, erysipelas, &c—*American Medical Times.*